

ISGE 19th Annual Congress

in conjunction with the

AGES XX Annual Scientific Meeting

FACULTY A/Prof. Jason Abbott Australia Prof. Masaaki Andou Japan Prof. Stefano Bettocchi Italy Dr Bernd Bojahr Germany Dr Mark Bowman Australia A/Prof. Jubilee Brown USA Dr Gregory Carlo Australia Dr Danny Chou Australia A/Prof. Maurice Chung USA A/Prof. Michael Cooper Australia Prof. Jacques Dequesne Switzerland Prof. Rudy De Wilde Germany Prof. Ellis Downes UK Dr Michael East New Zealand Dr Pedro Escobar USA Dr Susan Evans Australia Prof. Ray Garry United Kingdom Prof. Bash Goolab South Africa Prof. Dr Wachyu Hadisaputra Indonesia A/Prof. Peter Illingworth Australia A/Prof. Thomas Jobling Australia Dr Kurian Joseph India A/Prof. Alan Lam Australia Prof. Chyi-Long Lee Taiwan Dr Yves Leroy Mexico Dr Tom Lyons USA A/Prof. Peter Maher Australia Prof. Prashant Mangeshkar India Prof. Tony McCartney Australia Prof. Timothy McKinney USA Prof. Lilo Mettler Germany Dr Charles Miller USA Dr Allan Molloy Australia Dr David Molloy Australia Prof. Joo-Hyun Nam Korea Prof. Michelle Nisolle Belgium Dr Rob O'Shea Australia Dr Pravin Patel India Dr Carlos Petta Brazil Dr Geoffrey Reid Australia Dr Anna Rosamilia Australia Dr David Rosen Australia Prof. Jim Ross USA Dr Stuart Salfinger Australia Dr Tamer Seckin USA Dr Elvis Seman Australia Prof. Dr Osama Shawkil Egypt Dr Rupert Sherwood Australia Prof. Mitsuru Shiota Japan Dr Omella Sizzi Italy A/Prof. Artin Ternamian Canada Prof. Hans-Rudolf Tinneberg Germany Dr Jim Tsaltas Australia Dr Duncan Turner USA Dr Alberto Valero Mexico Prof. Thierry Vancaillie Australia Prof. Bruno van Herendael Belgium Prof. Hugo Verhoeven Germany Dr Antoine Watrelot France Ms Wendy Winer USA A/Prof. Anusch Yazdani Australia Prof. P M Yuen Hong Kong



Gynaecological
Endoscopy:
has it come of age?

Program & Abstracts

26 – 29 May 2010
Sydney Australia

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Gynaecological Endoscopy: has it come of age?

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26 – 29 May 2010
Sydney Australia

AGES & ISGE

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Ms Michele Bender	Executive Director	New South Wales

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Prof. Mitsuru Shiota	Japan
Prof. Bhaskar Goolab	South Africa
Prof. Hugo Verhoeven	Germany
Prof. Pong Mo Yuen	Hong Kong
Prof. Dr Osama Shawki	Egypt
Dr Yan Liu	China

Congress Committee & Faculty

Congress Organising Committee

Congress Co-Chairs	A/Prof. Alan Lam, Dr Jim Tsaltas
Honorary Chair	A/Prof. Peter Maher
Program Co-Chairs	Dr Rob O'Shea, Dr Charles Miller
Congress Director	Ms Michele Bender
Committee Members	Dr Robert Ford A/Prof. Harry Merkur

Australian Faculty

A/Prof. Jason Abbott	New South Wales
Dr Mark Bowman	New South Wales
Dr Greg Cario	New South Wales
Dr Danny Chou	New South Wales
A/Prof. Michael Cooper	New South Wales
Dr Susan Evans	South Australia
A/Prof. Peter Illingworth	New South Wales
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Dr Elvis Seman	South Australia
Dr Rupert Sherwood	Tasmania
Dr Jim Tsaltas	Victoria
Prof. Thierry Vancaillie	New South Wales
A/Prof. Anusch Yazdani	Queensland

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Dr Bernd Bojahr	Germany
A/Prof. Jubilee Brown	USA
A/Prof. Maurice Chung	USA
Prof. Jacques Dequesne	Switzerland
Prof. Rudy De Wilde	Germany
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Dr Michael East	New Zealand
Dr Pedro Escobar	USA
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Prof. Bash Goolab	South Africa
Dr Wachyu Hadisaputra	Indonesia
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Prof. Hugo Verhoeven	Germany
Dr Antoine Watrelot	France
Ms Wendy Winer	USA
Prof. Pong Mo Yuen	Hong Kong

Points, Membership & Meetings

CPD Points

This meeting has been approved as a RANZCOG Approved O&G Meeting and eligible Fellows of this College will earn CPD points for attendance as follows:

Full attendance	24
Attendance 27 May	9
Attendance 28 May	9
Attendance 29 May	4
Attendance 28 May Breakfast Session	1
Attendance 29 May Breakfast Session	1

Attendance by eligible RANZCOG Members will only be acknowledged following signature of the attendance roll each and every day of the Congress.

Registration Fee Inclusions

- Attendance at Opening Ceremony
- Attendance at Welcome Reception
- Attendance at all Congress Sessions
- Congress satchel and all Congress publications
- Congress lunches, morning and afternoon teas on Thursday 27 and Friday 28 May; Congress morning tea on Saturday 29 May

Other AGES Meetings in 2010



AGES FOCUS MEETING – 2010

The Ovary and the Gynaecologist

Darwin, Northern Territory

13 & 14 August 2010



AGES PELVIC FLOOR SYMPOSIUM & WORKSHOP XI

Improving Surgical Outcomes

Brisbane, Queensland

15 & 16 October 2010



AGES/RANZCOG TRAINEE WORKSHOP VI

Melbourne, Victoria

26 & 27 November 2010

Welcome

Dear Colleagues,

On behalf of The International Society for Gynecologic Endoscopy (ISGE), it is with great pleasure and humility that we welcome you to the 19th Annual Congress of the ISGE, held jointly and in conjunction with XX Annual Scientific Meeting of the Australasian Gynecological Endoscopy and Surgical Society (AGES). With a spectacular world class city, Sydney as the backdrop, we excitedly await this important exchange of scientific information as presented by our Australian, New Zealand, and international faculty, as we explore the theme of this extraordinary educational enclave, "Gynecological Endoscopy: Has it Come of Age?"

We are certain that our ambitious scientific program will be invaluable to all, as together we evaluate the role of minimally invasive gynecologic surgery – where we have been, where we presently reside, and where we will be in the future. It is this keen vision toward the future, gleaned from the evidence of over a quarter century of experience, as well as the unique collegiality, a hallmark of our two internationally revered societies, that is certain to make this more than an international meeting; rather, an academic experience.

So, once again, welcome one and all. We trust you will enjoy the fruit of joint efforts. Please do not hesitate to say "Hi or Buongiorno".

Cordially,

Prof. Stefano Bettocchi
President, ISGE

Dr Charles E. Miller
Vice President, ISGE

Dear Colleagues

On behalf of Australasian Gynecological Endoscopy and Surgical Society (AGES) and the International Society of Gynaecologic Endoscopy (ISGE) it is our privilege to welcome our International and Australian colleagues to the combined ISGE 19th Annual Congress in conjunction with the AGES XX Annual Scientific Meeting.

We are delighted to co-host such an exciting meeting, and honoured to host an extensive expert international and national faculty.

The program consists of two concurrent sessions, two plenary lectures each day, free communications and ending the day with the controversial topic of the day. These sessions have been designed to stimulate, excite and encourage interaction and discussion.

Both these societies have long been recognised for their commitment and leadership in minimally invasive gynaecologic surgery. We hope you all enjoy the delights of Sydney, some unforgettable Australian hospitality and most importantly a truly international program.

A/Prof. Alan Lam
President, AGES
Congress Co-Chair

Dr Jim Tsaltas
Vice President, AGES
Congress Co-Chair

Congress Program

Wednesday 26 May 2010

1500 – 1800

CONGRESS REGISTRATION

Level 3 Exhibition Area

1800 – 1900

OPENING CEREMONY

Level 3 Grand Ballroom A

The Congress will be opened by Her Excellency, Marie Bashir AV CVO, Governor of NSW
The Opening Ceremony will include live entertainment and a keynote presentation

1900 – 2100

WELCOME RECEPTION

Level 3 Exhibition Area

Enjoy good friends, fine food and wines

Prizes and Awards

John Kerin Award for Best Free Communication

Sponsored by Covidien

Best Free Communication

Sponsored by AGES and ISGE

Best Video Presentation

Sponsored by B Braun

Best Video Presentation

Sponsored by AGES and ISGE

Best Registrar Presentation

Sponsored by Johnson & Johnson Medical

Best Registrar Presentation

Sponsored by AGES and ISGE

Best Poster Presentation

Sponsored by Karl Storz Endoscopy



Congress Program

Thursday 27 May 2010

0700 – 0800

CONGRESS REGISTRATION

Level 3 Exhibition Area

0800 – 1000
SESSION 1

HYSTERECTOMY

Sponsored by Stryker

Level 3 Grand Ballroom A

Chairs: A/Prof. Peter Maher, Prof. Jacques Dequesne

- | | | |
|-------------|---|---------------------------|
| 0800 – 0815 | Total Laparoscopic Hysterectomy from Inception to Acceptance | Dr David Molloy |
| 0815 – 0830 | Sub-total Hysterectomy – A Surgical Gimmick or Made for Laparoscopy? | Dr Tom Lyons |
| 0830 – 0845 | Does Lift Laparoscopy Have a Place in Hysterectomy? | Dr Daniel Kruschinski |
| 0845 – 0900 | Natural Orifice Hysterectomy; Still the Best? | Prof. Bash Goolab |
| 0900 – 0915 | Are Complications Still the Achilles' Heel of Laparoscopic Hysterectomy? | Dr Rob O'Shea |
| 0915 – 0930 | Complications of Subtotal Hysterectomy – experiences with 6650 Operations ('98-'09) | Prof. Bernd Bojahr |
| 0930 – 0945 | Laparoscopic Single Entry and Hysterectomy | Prof. Bruno van Herendael |
| 0945 – 1000 | Discussion | |

HYSTEROSCOPY

Sponsored by Karl Storz Endoscopy

Level 2 Stateroom

Chairs: Prof. Stefano Bettocchi, Prof. Hugo Verhoeven

- | | | |
|-------------|---|----------------------------|
| 0800 – 0815 | Hysteroscopy in the Office | A/Prof. Thierry Vancaillie |
| 0815 – 0830 | Hysteroscopy and Assisted Reproduction: Collaboration not Competition | Prof. Osama Shawki |
| 0830 – 0845 | Hysteroscopy in a Developing Society | Dr Wachyu Hadisaputra |
| 0845 – 0900 | Plusses and Pitfalls of Hysteroscopic Sterilisation | Dr David Rosen |
| 0900 – 0915 | The Limitations of Hysteroscopic Myomectomy | A/Prof. Jason Abbott |
| 0915 – 0930 | Endoscopic Management of Uterine Anomalies | Dr Kurian Joseph |
| 0930 – 0945 | Next Generation Ablation Techniques | Prof. Ellis Downes |
| 0945 – 1000 | Discussion | |

1000 – 1030



MORNING TEA & TRADE EXHIBITION
LEVEL 3 EXHIBITION AREA

1030 – 1100

PLENARY LECTURE: NEW TECHNOLOGY IN HYSTEROSCOPY

Level 3 Grand Ballroom A Chairs: Dr Jim Tsaltas, Dr Duncan Turner

Prof. Stefano Bettocchi

1100 – 1230
SESSION 2

ADHESIONS

Sponsored by Johnson & Johnson Medical

Level 3 Grand Ballroom A

Chairs: Prof. Lilo Mettler, Dr Daniel Kruschinski

- | | | |
|-------------|---|---------------------|
| 1100 – 1115 | Managing Adhesions: Laparotomy vs. Laparoscopy | Dr Carlos Petta |
| 1115 – 1130 | Ovarian Suspension to Prevent Adhesions | Dr Michael East |
| 1130 – 1145 | The Role of Second Look Laparoscopy | A/Prof. Peter Maher |
| 1145 – 1200 | Adhesion Prophylaxis – A Reality? | Prof. Rudy De Wilde |
| 1200 – 1215 | Will Single Port Laparoscopy Lead to Less Adhesions | Dr Hugo Verhoeven |
| 1215 – 1230 | Discussion | |

ONCOLOGY

Sponsored by Olympus

Level 2 Stateroom

Chairs: Prof. Tony McCartney, Dr Joo-Hyun Nam

- | | | |
|-------------|---|-----------------------|
| 1100 – 1115 | Pioneering Tales of an Australian Gynaecological Oncologist | A/Prof. Tom Jobling |
| 1115 – 1130 | Training in Advanced Gynaecological Endoscopy for Oncology | Dr Stuart Salfinger |
| 1130 – 1145 | The Place of Laparoscopic Surgery in Ovarian Cancer | A/Prof. Jubilee Brown |
| 1145 – 1200 | Robotics in the Management of Gynaecological Oncology | Prof. Chyi-Long Lee |
| 1200 – 1215 | The Role of the Laparoscope in Endometrial Cancer | Prof. Joo-Hyun Nam |
| 1215 – 1230 | Discussion | |

1230 – 1300

PLENARY LECTURE: THE PERPETUAL DANIEL O'CONNOR LECTURE ROLE OF LAPAROSCOPIC SURGERY IN NON-UTERINE OR CERVICAL CANCER

Level 3 Grand Ballroom A Chairs: A/Prof. Alan Lam, Dr Rob O'Shea

Prof. Tony McCartney

Congress Program

Thursday 27 May 2010 (continued)

1300 – 1400



LUNCH & TRADE EXHIBITION
LEVEL 3 EXHIBITION AREA

1400 – 1530

SESSION 3:
FREE COMMUNICATIONS

FREE COMMUNICATIONS A: ENDOMETRIOSIS I

Level 3 Grand Ballroom A
Chairs: Dr Geoff Reid, Dr Stuart Salfinger

- 1400 What is the predictive value of history taking for bowel endometriosis?
Khong S-Y, Lam A, Luscombe G
- 1409 Segmental bowel resection with total laparoscopic hysterectomy in case of severe endometriosis
Wang L, Tsaltas J, Woods R
- 1418 Predicting colorectal involvement in surgery for treatment of severe endometriosis
Khong S-Y, Lam A, Luscombe G
- 1427 Preoperative assessment of endometriosis: the role of ultrasound
Bignardi T, Lam A
- 1436 Laparoscopic cystectomy – how to tackle the big cyst
Siow A, Chua I
- 1445 Complication rates in laparoscopic management of endometriosis in a tertiary referral centre
Kew C, Lam A, Bignardi T, Khong S-Y
- 1454 Laparoscopic excision of bladder and recto-vaginal endometriosis with low rectal resection
Bignardi T, Khong S-Y, Evans J, Lam A
- 1503 Basic surgical skills training: does it work?
Koch J, Clements S, Abbott J
- 1512 Can we predict Pouch of Douglas obliteration using sonovaginography in women with chronic pelvic pain?
Reid S, Bignardi T, Alhamdan D, Reid G, Condous G
- 1521 Mirena Intra-Uterine System: does it improve long term symptoms in women with chronic pelvic pain and/or endometriosis after laparoscopy? A multicentre randomized controlled trial
Alhamdan D, Bignardi T, Hardas G, Merkur H, Condous G

FREE COMMUNICATIONS B: ONCOLOGY / PREGNANCY MASSES

Level 2 Stateroom
Chairs: A/Prof. Jason Abbott, Dr Michael East

- 1400 Laparoscopic vaginal radical trachelectomy in early cervical cancer
Shen K, Lang J, Yang J, Xiang Y, Huang H, Wu M
- 1409 Strategies to accomplish retroperitoneoscopic lymphadenectomy
Hoshiba T, Kawamura H, Sasakura C, Maekawa M, Hirabuki S-Y, Sasaki H, Asamoto A
- 1418 Nerve-sparing laparoscopic radical hysterectomy in early-stage cervical cancer
Nam J-H, Lim S, Park J-Y
- 1427 The triage of ovarian masses by regional gynaecologists
Langdon F, Cottee T, Salfinger S
- 1436 The effect of patient BMI on surgical difficulty in laparoscopic gynaecological surgery
Mcllwaine K, Cameron M, Readman E, Manwaring J, Maher P
- 1445 Management of ovarian masses during pregnancy: laparotomy vs. laparoscopy
Kim JY, Nam J-H, Kim Y-T, Kim Y-M, Kim J-H, Kim D-Y, Yoo HJ, Joo W-D, Park J-Y
- 1454 Laparoscopic management of ovarian torsion in pregnancy
Yim LY, Anpalagan A
- 1503 An eight year series of laparoscopic cystectomy in pregnancy
Hazim WA, Puteri L, Noraihan M N
- 1512 Large ovarian cyst in pregnancy: port placement and technique
Wang L, Tsaltas J, Najjar H
- 1521 Diagnostic and management dilemma: incidental diagnosis of leiomyosarcoma following laparoscopic myomectomy
Khong S-Y, Lam A, Robertson G, Gard G

Congress Program

Thursday 27 May 2010 (continued)

 LUNCH & TRADE EXHIBITION
LEVEL 3 EXHIBITION AREA

FREE COMMUNICATIONS C: FIBROIDS / HYSTERECTOMY / HYSTEROSCOPY

Level 2 Rooms 5/6

Chairs: A/Prof. Michael Cooper, Dr Bash Goolab

- 1400 Complications at operative hysteroscopy requiring reintervention: a retrospective study
Schoneveld AL, Vanderlinden S, Dedecker A
- 1409 The fibroid necklace
Aust T, O'Neill A, Chou D, Rosen D, Cario G
- 1418 A novel technique for opened uterine cavity in deep intramural fibroids: two step bottom up suturing technique in laparoscopic myomectomy
Oku H, Matsumoto T, Saeki A, Hashimoto Y, Kuramori R, Akashi Y, Chien HW, Morishita M, Ikuma K
- 1427 Ureteric injury following operative hysteroscopy: a case report
Schoneveld A, Vanderlinden S, Depierreux A, Dedecker A
- 1436 Laparoscopic management of parasitic myoma
O'Neill A, Aust T, Rosen D, Chou D, Cariogmv
- 1445 Prediction of the need for morcellation at total laparoscopic hysterectomy (TLH) from pre-operative 3-D volumetric ultrasound-estimated uterine weight
Alhamdan D, Bignardi T, Reid S, Mongelli M, Chou D, Condous G
- 1454 Laparoscopic myomectomy in large fibroids
Nikam Y, Merkur H
- 1503 Is office hysteroscopy suitable as a diagnostic screening procedure in menopause?
Ceci O, Bettocchi S, Pinto L, Laera AF, Achilarré MT, Mangiatordi G, Chiarulli EF, Selvaggi L
- 1512 Use of Versapoint in patients facing a difficult embryo transfer
Mahajan N

FREE COMMUNICATIONS D: GENERAL SURGERY

Level 4 Rooms 1/2

Chairs: Dr Krish Karthigasu, Dr Prashant Mangeshkar

- 1400 What is sonovaginography and how can it help the laparoscopic surgeon?
Reid S, Bignardi T, Alhamdan D, Reid G, Condous G
- 1409 Tips & tricks for laparoscopy made easy
Siow A
- 1418 The value of pre-operative ultrasound in triaging women with adnexal pathology for advanced laparoscopic surgery
Alhamdan D, Bignardi T, Reid S, Lu C, Reimke J, Casikar I, Mongelli M, Condous G
- 1427 Has robotic-assisted surgery come of age?
Law K, Tam KF, Ngan H
- 1436 Laparoscopic repair of caesarean scar dehiscence
Tai WC, Anpalagan A, Tong A
- 1445 The feasibility and safety of laparoscopic management of adnexal tumor in pediatric and adolescent patients
Lee JS
- 1454 Laparoscopic peritoneal graft for vaginoplasty
Kotdawala P
- 1503 Trans umbilical endoscopic surgery – Indian experience
Shukla-Kulkarni A
- 1512 Single-port laparoscopic surgery in gynecology
Han C-M, Su H, Wang C-J, Lee C-L
- 1521 Single Port Access surgery – initial experience
Siow A

SATELLITE MEETING

MEETING OF THE GERMAN ENDOSCOPY SOCIETY

Level 1 Room 2

Chairs: Prof. Lilo Mettler,
Prof. Hugo Verhoven

- 1400 Combined Laparoscopic Vaginal Surgery of 'Deep Infiltration Endometriosis'
Prof. Klaus J Neis
- 1415 Endometriosis and Ovarian Reserve
Prof. Hans-Rudolf Tinneberg
- 1430 Andenomyosis 2010 – Did we Learn from the Past?
Prof. Lilo Mettler
- 1445 Complications in Laparoscopic Surgery – Questions & Answers
Prof. Lilo Mettler, Prof. Rudi DeWilde, Prof. Hugo Verhoeven, Prof. Klaus, J Neiss, Prof. Bernd Bojahr
- 1500 Laparoscopic Sacropepy – Indications, Surgical Technique and Complication Rate
Prof. Bernd Bojahr
- 1515 Implementation of High Standard Endoscopy in Hospitals Through a 'Flying Doc' Concept
Priv. Doz. Dr Darius Dian

Congress Program

Thursday 27 May 2010 (continued)

1530 – 1600

 AFTERNOON TEA & TRADE EXHIBITION
LEVEL 3 EXHIBITION AREA

1600 – 1730
SESSION 4

CONTROVERSY OF THE DAY: COSMESIS AND THE GYNAECOLOGIST

Sponsored by Stryker
Level 3 Grand Ballroom A
Chairs: Prof. Ellis Downes, Dr Bash Goolab

1600 – 1620 'N.O.T.E.S.' in Gynaecology

Prof. Hans-Rudolf Tinneberg

1620 – 1640 Single Port Laparoscopy

Dr Pedro Escobar

1640 – 1700 The 'Cosmetic Gynaecologist'

Dr Duncan Turner

1700 – 1730 Panel Discussion



Congress Program

Friday 28 May 2010

0700 – 0750



BREAKFAST
LEVEL 4 ROOMS 3-5

This is a ticketed event – pre-booking essential

BREAKFAST SYMPOSIUM: 'BREAKFAST WITH THE STARS'

Sponsored by Stryker

Congress faculty members lead discussions on specific topics

0800 – 1000

SESSION 5

ENDOMETRIOSIS

Sponsored by Stryker

Level 3 Grand Ballroom A

Chairs: Prof. Ray Garry, Prof. Thierry Vancaillie

0800 – 0815 How to Plan the Surgical Approach to Severe Endometriosis

A/Prof. Peter Maher

0815 – 0830 Multidisciplinary Consultation for Management of Deep Infiltrating Endometriosis

Prof. Jacques Dequesne

0830 – 0845 Computer Animation and Simulation of Endometriosis

Dr Tamer Seckin

0845 – 0900 Is Nerve-Sparing Surgery Possible in the Treatment of Severe Endometriosis

A/Prof. Alan Lam

0900 – 0915 Outcomes after Radical Treatment of Deep Infiltrating Endometriosis

Prof. Michelle Nisolle

0915 – 0930 Surgical Approach to Colorectal Endometriosis

Dr Jim Tsaltas

0930 – 1000 Discussion

PELVIC FLOOR / PROLAPSE I

Sponsored by Johnson & Johnson Medical

Level 2 Stateroom

Chairs: Dr Greg Cario, Dr Kym Jansen

0800 – 0820 The Neurophysiology of Pelvic Floor Dysfunction

Prof. Timothy McKinney

0820 – 0840 Critical Evaluation of Pelvic Floor Defects

Dr Elvis Seman

0840 – 0900 Role of Urodynamics in Pelvic Floor Surgery

Dr Anna Rosamilia

0900 – 0920 Vaginal Mesh – Angel or Demon

Prof. Timothy McKinney

0920 – 0940 The Ideal Mesh for Pelvic Organ Prolapse

Prof. Jim Ross

0940 – 1000 Discussion

1000 – 1030



MORNING TEA & TRADE EXHIBITION
LEVEL 3 EXHIBITION AREA

1030 – 1100

PLENARY LECTURE: MENSTRUATION, ENDOMETRIOSIS AND STEM CELLS

Level 3 Grand Ballroom A Chairs: Prof. Michelle Nisolle, A/Prof. Jason Abbott

Prof. Ray Garry

1100 – 1230 **SESSION 6**

FIBROIDS

Sponsored by Johnson & Johnson Medical

Level 3 Grand Ballroom A

Chairs: Dr Charles Miller, A/Prof. Harry Merkur

1100 – 1120 Non-Surgical Therapies for Uterine Fibroids

Prof. Pong Mo Yuen

1120 – 1140 Laparoscopic Myomectomy – How Big is Too Big?

Dr Ornella Sizzi

1140 – 1200 Different Strategies for Laparoscopic Myomectomy for the Large Fibroid Uterus

A/Prof. Prashant Mangeshkar

1200 – 1220 Limitations of Laparoscopic Myomectomy

Prof. Mitsuru Shiota

1220 – 1230 Discussion

PELVIC FLOOR / PROLAPSE II

Sponsored by Karl Storz Endoscopy

Level 2 Stateroom

Chairs: Prof. Bruno van Herendael, Dr Elvis Seman

1100 – 1120 The Evolution of Laparoscopic Surgery in Pelvic Floor Prolapse

Dr Rob O'Shea

1120 – 1140 Laparoscopic Sacral Colpopexy – Tricks of the Trade

Dr Greg Cario

1140 – 1200 Laparoscopic Sacral Colpopexy – The Evidence

Dr Anna Rosamilia

1200 – 1230 Panel Discussion: Is the Laparoscope Still Necessary in Pelvic Floor Surgery?

Chair: Dr Rob O'Shea

Panel: Prof. Timothy McKinney, Dr Anna Rosamilia, Prof. Jim Ross, Dr Greg Cario

INFERTILITY

Sponsored by Olympus

Level 4 Rooms 3-5

Chairs: A/Prof. Anusch Yazdani, Dr Tamer Seckin

1100 – 1115 PCOS: Medical Treatment

Dr Mark Bowman

1115 – 1130 Place of Tubal Surgery in Infertility

Dr Yves Leroy

1130 – 1145 Last Update in Fertiloscopy: A 10 Year Reappraisal

Dr Antoine Watrelot

1145 – 1200 Complications of IVF

A/Prof. Peter Illingworth

1200 – 1220 Role of Fertility Enhancing Laparoscopic Fertility Surgeries in ART: Indian Scenario

Dr Pravin Patel

1220 – 1230 Discussion

Congress Program

Friday 28 May 2010 (continued)

1230 – 1300

PLENARY LECTURE: THE PLACE OF MYOMECTOMY IN THE INFERTILE PATIENT

Level 3 Grand Ballroom A Chairs: Dr John Sciarra, Dr Ornella Sizzi

Dr Charles Miller

1300 – 1400



LUNCH, TRADE EXHIBITION & POSTER JUDGING
LEVEL 3 EXHIBITION AREA

1400 – 1530

SESSION 7: FREE COMMUNICATIONS

FREE COMMUNICATIONS E: ENDOMETRIOSIS II

Level 3 Grand Ballroom A
Chairs: Dr Greg Cario, Dr Yves Leroy

- 1400 Effects of laparoscopic treatment of endometriosis on quality of life using the Endometriosis Health Profile questionnaire (EHP 30)
Kew C, Lam A
- 1409 Correlation between symptoms and anatomical locations of endometriosis at laparoscopy
Bignardi T, Kew C, Khong S-Y, Luscombe G, Lam A
- 1418 Double trouble: a case of endometriosis in patient with uterus didelphys
Wang L, Amir M, Tsaltas J
- 1427 Can we predict posterior compartment deep infiltrative endometriosis (DIE) using sonovaginography in women undergoing laparoscopy for chronic pelvic pain?
Reid S, Bignardi T, Alhamdan D, Reid G, Condous G
- 1436 Implementation of a web-based pain diary for endometriosis patients, 'Herdiary': an exploratory study
Khazali S, Loudon K, Moors A, Ballard K
- 1445 Deep bladder endometriosis-surgical treatment
Amir M, Tsaltas J, Donnellan S, Chan Y, Tan J
- 1454 A long term prospective observational study of the impact of radical laparoscopic excision of severe endometriosis on pain and quality of life parameters
Majumder K, Hart R, Karthigasu K, McElhinney B, Burke C, Meninger I
- 1503 Is Pouch of Douglas (POD) obliteration a marker of bowel endometriosis?
Khong S-Y, Bignardi T, Lam A, Luscombe G
- 1512 Endometrial osseous metaplasia: 2 cases of a rare diagnosis
Jagasia N
- 1521 Lower urinary tract and bowel dysfunction following radical endometriosis resection
Krishnan S, De Vries B, Cooper M, Li Y

FREE COMMUNICATIONS F: HYSTERECTOMY / ECTOPIC PREGNANCY

Level 2 Stateroom
Chairs: Dr Raphael Kuhn, A/Prof. Jubilee Brown

- 1400 Chlamydia trachomatis in fallopian tubes of women undergoing laparoscopy for ectopic pregnancy
Alhamdan D, Bignardi T, Mongelli M, Casikar I, Reimke J, Branley J
- 1409 Selected use of ureteral catheter in anticipated difficult laparoscopic surgery: a retrospective analysis
Angstetra D, Chang T
- 1418 Total laparoscopic hysterectomy – the magic of conventional Bi-Polar and Unipolar
Brahmbhatt S
- 1427 Hybrid NOTES hysterectomy – dynamic transvaginal laparoscopy
Andou M
- 1436 Removal of uteri during total laparoscopic hysterectomy
Hashimoto Y, Matsumoto T, Kuramori R, Chein HW, Akashi Y, Oku H, Saeki A, Ikuma
- 1445 Pursestring suture technique to enable laparoscopic management of interstitial ectopic pregnancy
Aust I, O'Neill A, Chou D, Rosen D, Cario G
- 1454 Estimation of uterine dry weight from pre-operative 3-D uterine volume ultrasound evaluation in women undergoing total laparoscopic hysterectomy (TLH)
Alhamdan D, Bignardi T, Reid S, Mongelli M, Chou D, Condous G
- 1503 Ruptured ectopic pregnancy and routine laparoscopic management in shock... shocking?
Vij P, Cherian TK
- 1512 Can we reduce the need for laparoscopic surgery in women with an ectopic pregnancy? Conservative management of ectopic pregnancy: the pre-treatment human chorionic gonadotrophin (hCG) ratio
Alhamdan D, Bignardi T, Reid S, Reimke J, Casikar I, Lu C, Mongelli M, Condous G
- 1521 Introducing the 'magnet method' into gynecological single port surgery
Takaki Y, Andou M

Congress Program

Friday 28 May 2010 (continued)

 LUNCH, TRADE EXHIBITION & POSTER JUDGING
LEVEL 3 EXHIBITION AREA

FREE COMMUNICATIONS G: COMPLICATIONS

Level 2 Rooms 5/6

Chairs: Dr Hugh Torode, Prof. Carlos Petta

- 1400 Bubbles in the uterus – a life threatening situation
Kaur H
- 1409 Principles and practical applications of electrosurgery in laparoscopy
Kingston AJ, Lyons SD, Abbott JA, Vancaillie TG
- 1418 The role of exploratory laparoscopy for suspected bowel injury after difficult laparoscopic surgery
Bignardi T, Khong S-Y, Lam A
- 1427 Laparoscopic management of urinary tract injuries
Andou M
- 1436 Vault dehiscence after laparoscopic hysterectomy in a 9 year period at Sydney West Advanced Pelvic Surgical Unit
Chan WSW, Kong KY, Nikam Y, Merkur H
- 1445 An uncommon case: epigastric artery injury at umbilical port entry during laparoscopic hysterectomy
Nikam Y, Merkur H
- 1454 Complications in laparoscopy – lessons from 10 years series
Siow A, Chua I
- 1503 Uterine artery rupture during clip application
Aust T, O'Neill A, Rosen D, Chou D, Cario G
- 1512 Operative laparoscopy complications in 6607 cases in an advanced gynaecological endoscopy unit
O'Neill A, Aust T, Rosen D, Chou D, Carlton M, Cooper M, Reid G, Cariogm
- 1521 XCEL Bladeless Trocar vs. Veress Needle: a randomised controlled trial comparing these two entry techniques in gynaecological laparoscopic surgery (Interim results)
Manley T, Vollenhoven B, Tsaltas J, Lawrence A, Najjar H, Pearce S, J. Tan, Chan KW, Wang L

FREE COMMUNICATIONS H: PELVIC ORGAN PROLAPSE

Level 4 Rooms 1/2

Chairs: Dr David Rosen, Prof. Dr Osama Shawki

- 1400 Laparoscopic mesh sacrocolpopexy and rectopexy in a woman with multi-compartment prolapse
O'Neill A, Aust T, Rosen D, Gan S, Chou D, Cariogm
- 1409 Laparoscopic extraction of arm of anterior PROLIFT causing nerve entrapment symptoms
Aust T, O'Neill A, Chou D, Rosen D, Cario G
- 1418 Laparoscopic anterior mesh repair – a new technique?
O'Neill A, Aust T, Cook J, Rosen D, Chou D, Cariogm
- 1427 The key to laparoscopic pelvic floor repair. The role of 'Uterosacral Fascial Marker Suture' in vaginal vault suspension
Krishnan S, Lamaro V, Li Y
- 1436 The evolution of laparoscopic pelvic floor repair in the Sydney Womens Endosurgery Centre
O'Neill A, Aust T, Rosen D, Chou D, Cook J, Cariogm
- 1445 Hysterectomy does not reduce recurrence of level one female pelvic organ prolapse (POP), when combined with posterior infracoccygeal colpopexy
Barry C, Juneja M
- 1454 Laparoscopic sacrocolpopexy: gold standard for vault prolapse
Bedford N, O'Shea R, Seman E, Cook J, Behnia-Willison F, Gibberd S, Keirse M
- 1503 Use of surgisis in the treatment of anterior and posterior vaginal prolapse
Gibberd S, Seman E, Cook J, Behenia-Wilson F, Lam C
- 1512 Laparoscopic paravaginal repair: Is the challenge worth it?
Bedford N, O'Shea R, Seman E, Behnia-Willison F, Cook J, Lam C, Gibberd S, Keirse M
- 1521 'Central dissection of bladder'; A bladder dissection technique in case of TLH for patients having undergone previous caesarean sections
Shukla DV, Shukla SD

SATELLITE MEETING

MEETING OF THE SOCIETY OF LAPAROENDOSCOPIC SURGEONS

Level 1 Room 2

Chairs: A/Prof. Maruice Chung,
Prof. Paul Wetter

- 1400 SLS Offers a Powerful Learning Tool for Surgeons Worldwide
Prof. Paul Wetter
- 1430 General Surgery Pearls for Gynaecologists
Dr John Morrison
- 1500 The Value of Cystoscopy for the Gynaecological Surgeon
Prof. Mark Erian

Congress Program

Friday 28 May 2010 (continued)

1430 – 1600

 AFTERNOON TEA & TRADE EXHIBITION
LEVEL 3 EXHIBITION AREA

1600 – 1730
SESSION 8

CONTROVERSY OF THE DAY: THE IMPACT OF ENDOMETRIOSIS ON INFERTILITY AND IVF

Sponsored by Stryker

Level 3 Grand Ballroom A

Chairs: Dr David Molloy, Dr Lip Kee Yap, Dr Kurian Joseph

1600 – 1610	Is Laparoscopy Necessary Pre-IVF?	Dr Alberto Valero
1610 – 1620	The Impact of Endometriosis on IVF Outcome	Dr Jim Tsaltas
1620 – 1630	Infertility and Colo-Rectal Endometriosis	Dr Geoff Reid
1630 – 1640	Deep Infiltrative Endometriosis and IVF	Dr Carlos Petta
1640 – 1650	Surgery or More IVF?	A/Prof. Anusch Yazdani
1650 – 1730	Panel Discussion	

1730 – 1800

AGES ANNUAL GENERAL MEETING

Level 3 Grand Ballroom A

ISGE GENERAL ASSEMBLY

Level 2 Stateroom

1900 for 1945

 GALA CONGRESS DINNER *This is a ticketed event – pre-booking essential*

Art Gallery of New South Wales

Art Gallery Road, The Domain NSW 2000

Complimentary coach transfers departing Hilton at 1830. Please assemble in hotel foyer.

Congress Program

Saturday 29 May 2010

0700 – 0750



SPONSORED BREAKFAST SESSION
LEVEL 4 ROOMS 3-5

This is a ticketed event – pre-booking essential

BREAKFAST SYMPOSIUM: OFFICE HYSTEROSCOPY

Sponsored by Karl Storz Endoscopy

Prof. Stefano Bettocchi

0800 – 0900

PANEL DISCUSSION:

TRAINING TOMORROW'S OBSTETRICIANS AND GYNAECOLOGISTS – TIME FOR CHANGE

Level 3 Grand Ballroom A

Chairs: Chairs: A/Prof. Alan Lam, Dr Jim Tsaltas

0800 – 0810 Dr Rupert Sherwood, President Elect RANZCOG, presents the College's vision

0810 – 0900 Q & A Session

Panel: Dr Rupert Sherwood, Dr Rob O'Shea, A/Prof. Peter Maher, Prof. Stefano Bettocchi, Dr Digby Ngan Kee, Dr Charles Miller, A/Prof. Maurice Chung, Dr Christopher Smith, Dr Carina Cotanu

0900 – 1030

SESSION 9

HAS LAPAROSCOPY LED TO MORE OR LESS COMPLICATIONS?

Level 3 Grand Ballroom A

Chairs: Dr Pedro Escobar, Dr Robert Ford

0900 – 0915 Consent in Advanced Laparoscopic Surgery

A/Prof. Michael Cooper

0915 – 0930 Avoiding and Managing Bowel Injuries in Laparoscopic Surgery

Dr Danny Chou

0935 – 0955 Avoiding and Managing Urinary Tract Injuries in Laparoscopic Surgery

Prof. Lilo Mettler

0955 – 1015 Complications of Single Port Laparoscopy

Prof. Masaaki Andou

1015 – 1030 Patient Care During Long Operative Laparoscopy

Ms Wendy Winer

1030 – 1100



MORNING TEA & TRADE EXHIBITION
LEVEL 3 EXHIBITION AREA

1100 – 1230

SESSION 10

MANAGEMENT OF PAIN

Sponsored by Stryker

Level 3 Grand Ballroom A

Chairs: A/Prof. Maurice Chung, Dr Michael McEvoy

1100 – 1115 Endometriosis and Chronic Pain: New Concepts, New Evidence and New Management

Dr Susan Evans

1115 – 1130 Does Mesh Cause Pain?

Dr Elvis Seman

1130 – 1145 The Evil Triplet of Chronic Pelvic Pain Syndrome: Pudendal Neuralgia

A/Prof. Maurice Chung

1145 – 1200 Medical Treatment of Chronic Pelvic Pain

Dr Allan Molloy

1200 – 1215 Discussion

1215 – 1225

PRESENTATION OF PRIZES

Dr Robert Ford, Dr Harry Merkur

1225 – 1230

CLOSE

Dr Jim Tsaltas, Prof. Stefano Bettocchi

Revolutionary HD Technology



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1288 HD 3 Chip® Camera

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Program Abstracts SESSION 1

TOTAL LAPAROSCOPIC HYSTERECTOMY FROM INCEPTION TO ACCEPTANCE

THURSDAY 27 MAY / SESSION 1
HYSTERECTOMY / 0800-0815

Molloy D

There is little doubt that the development of Laparoscopic surgery was one of the most significant developments ever in the history of surgery. Anyone familiar with this form of surgery is aware of the patient benefits in terms of less pain and faster recovery. Surgical precision and accuracy is improved and the range of operations able to be performed has substantially increased.

Hysterectomy has always been the signature operation of the gynaecologist and when the world's first laparoscopic hysterectomy was performed by Harry Riech, advanced laparoscopic surgery in gynaecology rapidly became of age. Australia was fortunate to have pioneering laparoscopic surgeons such as Carl Wood and Peter Maher and the take up of this surgery in Australia was relatively rapid.

However the talk today will focus more on the future than the past. The progress of laparoscopic surgery is now being impeded by the training programs available for registrars. The surgical experience is simply no longer available in an expanded training program where there are more registrars and fewer cases. The time is coming to establish laparoscopic surgery for benign conditions as a separate surgical stream within the college. There is a strong argument to divide O & G into Obstetrics, office and minor operative gynaecology, advanced surgery for benign conditions and the traditional subspecialty areas of imaging, fetomaternal medicine and oncology. There may be an argument for including urogynaecology into the advanced surgical stream. In the presentation I will look at the data examining the surgical training trends in Australia and looking at the surgical markets in the public and private sectors. The conclusion will be strongly support that specialist surgical training, particularly in advanced endoscopy needs to become a separate component of fellowship training in Australia and that this trend may well be emulated in many other countries.

AUTHOR AFFILIATION: Dr D. Molloy; Clinical Director Queensland Fertility Group Brisbane, Qld, Australia

LSH – A SURGICAL GIMMICK OR MADE FOR LAPAROSCOPY

THURSDAY 27 MAY / SESSION 1
HYSTERECTOMY / 0815-0830

Lyons T

In order for a procedure to become or be considered as the standard that procedure must meet certain criterion.

1. Correct the pathology – be effective
2. Produce reproducible results – be reliable
3. Have low morbidity – be safe
4. Be economically sound – be cost effective
5. Cover the majority of diagnoses – be versatile

Hysterectomy is one of the most effective surgical procedures that has been developed in modern medical times. This procedure reliably treats multiple diagnoses with low morbidity in a reliable manner with very reproducible results. Therefore, in order to make improvements in this procedure a procedure must be able to produce these same results with decreased morbidity.

The most common diagnosis requiring hysterectomy is dysfunctional uterine bleeding frequently due to uterine leiomyomata. Well over ninety five percent of the conditions that warrant hysterectomy do not require removal of the cervix. Certainly, the only absolute pathologies that mandate cervical removal are invasive cervical cancer and endometrial cancer. There are additionally some relative contraindications for cervical maintenance which include certain prolapse conditions and cervical/retrocervical endometriosis but these conditions account for less than two percent of hysterectomy indications.

Using a standardized technique, with reasonable individual surgeon differences (technologies, etc), the LSH procedure can address all of the noted pathologies in a reliable manner without compromise of reproducible results. Of course, safety is a tantamount issue. Isolated reports of retained tissue (secondary to morselation techniques) mucocoele, and stump necrosis have been reported but are rare. The most common reported morbidity is recurrent cyclic bleeding (incidence ranging from 1-25% depending upon the study). Our experience suggests that this is a technical issue and not a problem with the operation but rather a problem with the operator. Urinary tract injury (the most common major injury reported in pelvic surgery) is extremely rare in supracervical hysterectomy. Urinary tract infection is very unlikely. When examined in randomised control trials (Thakar et al) there has been no evidence of superiority of the total approach over the subtotal approach with regard to morbidity factors.

Simon et al, Lyons, and Zupi have demonstrated clearly that the supracervical approach remains an economically sound alternative with procedural cost similar while the shortened post operative recovery period with LSH resulted in decreased overall cost compared to total hysterectomy and even (in the Zupi study) in comparison to endometrial ablation. Nainani (AAGL 2005) further demonstrated significant intangible cost savings with rapid return to normal activity and job performance, and the eVALuate trial in the UK demonstrated similar findings although these conclusions were not included in the data that has been published thus far.

The versatility, reliability, safety, and effectiveness have been demonstrated in the series that Lyons has reported in over 1500 procedures over 14 years duration. All attendant pathologies were treated including uterine fibroids (up to 2800 grams), severe endometriosis, severe adhesive disease, and pelvic floor relaxation. Average duration of stay in the facility is 8.5 hours and return to work in 7-10 days. Febrile morbidity < 1%, transfusion rate 0%, re-operation rate < .001%, cyclic bleeding < 1%. Although this is a single surgeon experience both Daniel and McCarus have reported similar experiences as have Donnez and Brosens.

LSH seems to be certainly well more than a gimmick but rather a procedure made for laparoscopy and, more importantly, of significant benefit to our patient population.

Program Abstracts SESSION 1

NATURAL ORIFICE HYSTERECTOMY; STILL THE BEST?

THURSDAY 27 MAY / SESSION 1
HYSTERECTOMY / 0845-0900

Goolab B

Hysterectomy is still the most common procedure performed for most benign conditions. According to the National Centre for Health Statistics approximately 617 000 hysterectomies were performed in 2004. The most common indications include abnormal vaginal bleeding and uterine fibroids. Worldwide, 70% of hysterectomies are performed by the abdominal route. Vaginal hysterectomy is the best minimally access surgical procedure for hysterectomy. (I.e. Natural orifice surgery)

KNOWN BENEFITS OF VAGINAL HYSTERECTOMY: shorter hospital stay (compared to AH); less post-operative discomfort; faster operating time (compared to TLH) and fewer complications. Acknowledged to be the cheapest hysterectomy compared to AH and TLH.

EVALUATE Hysterectomy Trial; VALUE Study: Severe complications of hysterectomy; **COCHRAN Trial Register:** Systematic review and meta-analysis of randomised, controlled trials – methods of hysterectomy. The above trials confirm vaginal hysterectomy as the safest hysterectomy for menorrhagia and fibroid uteri.

Indications for LAVH and TLH – suspected pelvic pathology e.g. endometriosis, previous major gynaecological surgery.

Hence majority of hysterectomies are feasible as vaginal hysterectomy. This may be achieved by bisection of the uterus, myomectomy, morcellation and coring.

OBJECTIVE: To evaluate the feasibility and complication rate of vaginal hysterectomy in women with enlarged uteri.

DESIGN: For a total of 1400 women who underwent vaginal hysterectomy for B9 pathology. The normally considered contra-indications of the vaginal route: moderate to excessive uterine enlargement, nulliparity, previous caesarean section, previous gynaecological, minimal utero-vaginal descent.

PATIENT CHARACTERISTICS: Total number = 1400 cases

Mean age = 41.5 years (range 25-29)

Mean parity = 3.2 (range 0-6)

Nulliparity = 68 cases (5%)

Multiparity = 1332 cases (95%)

Previous abdominal surgery = 240 cases (16.5%)

Minimal uterine descent = 1308 cases (90%)

Previous caesarean section: Total = 208 cases (14.8%)

Caesarean section x1 = 122 cases (60.2%)

Caesarean section x2 = 54 cases (25%)

Caesarean section x3 = 32 (14.8%)

RESULTS: Total number of patients = 1400;

Abdominal Hysterectomy = 250; Conversion to TAH = 33 (2.4%);

Successful vaginal hysterectomy = 1117 (79.8%); Duration of surgery (mean time) = 95 min; Duration of stay in hospital (mean time) = 2.8 days (60 hours) (range 2-7 days); Mean weight of uterus = Mean 120 gm (range 80-520gm); Ave. weight of patient = 77kg (range 55-121kg)

COMPLICATIONS: Pelvic infection - 16 cases (1.3%); Retro peritoneal haematoma - 11 cases (1.0%); Vault haematoma - 6 cases (0.5%); Ureteric injury - 0 cases (0%); Bladder injury - 8 cases (0.8%); Complications related to: Laparoscopy - 0 cases (0%); Vault abscess - 6 cases (0.5%); Sub-acute bowel obstruction - 1 cases (0.1%)

CONCLUSION: Vaginal hysterectomy can be performed successfully in women with relative contra-indications and with enlarged uteri.

AUTHOR AFFILIATION: B.D. Goolab; University of Witwatersrand, Dept of Obstetrics and Gynaecology, Johannesburg, South Africa

ARE COMPLICATIONS STILL THE ACHILLES' HEEL OF LAPAROSCOPIC HYSTERECTOMY?

THURSDAY 27 MAY / SESSION 1
HYSTERECTOMY / 0900-0915

O'Shea R, Bedford N

The relatively low uptake of laparoscopic hysterectomy in gynaecology may reflect a number of issues. From a technical point of view, the procedure requires advanced laparoscopic skills along with the ability to suture. This may well have had a negative effect on its popularity.

Although the majority of complications of hysterectomy performed laparoscopically, such as bleeding, infection and bladder complications appear to be equivalent or better than via the standard approach, most published literature would suggest a higher risk of ureteric injury. When this factor is added to the issues of technical expertise the combination may well have a negative effect. It is imperative that gynaecologists understand the benefits of the laparoscopic approach in hysterectomy and develop their skills accordingly.

AUTHOR AFFILIATION: R. O'Shea, N. Bedford; Flinders Endogynaecology, Flinders University and Flinders Medical Centre, Adelaide, SA, Australia

COMPLICATIONS OF SUBTOTAL HYSTERECTOMY – EXPERIENCES WITH 6650 OPERATIONS (1998-2009)

THURSDAY 27 MAY / SESSION 1
HYSTERECTOMY / 0915-0930

Bojahr B, Tchatchian G

STUDY OBJECTIVE: The aim of the study was to determine peri-operative morbidity and complication rate following a standardized technique of laparoscopic supracervical hysterectomy (LASH).

DESIGN: Retrospective analysis of consecutive patients.

SETTING: Private Hospital.

PATIENTS: 2334 consecutive patients with symptomatic uterine myomata, dysfunctional uterine bleeding, dysmenorrhoea, or chronic pelvic pain

INTERVENTION: LASH using a unipolar hook for dissection of the body of the uterus followed by electric morcellation.

Program Abstracts SESSION 1

RESULTS: The main indications for the LASH were uterine myomata with dysfunctional uterine bleeding or without (83.4%), therapy resistant dysfunctional uterine bleeding (10.7%) and suspected uterine adenomyosis (5.2%). The mean uterine weight was 226.8 g, the mean duration of surgery was 87 minutes. More than half of the patients (52.9%) had a history of at least one previous laparotomy. In 17 patients (0.7%) a conversion to laparotomy was necessary. Of these 14 were due to the size and immobility of the uterus, one case was due to severe adhesions and in two cases because intra-operative complications arose. In total five (0.2%) intra-operative complications occurred. The mean uterine weight in 5 intra-operative complications (3 bladder injuries, 1 ureter injury, and 1 severe intra-operative bleed) was 818 g. In two of the patients who suffered trauma to the bladder there was a history of caesarian sections (2 and 3 respectively). The most common post-operative complications were bleeding from the cervix and pain caused by adhesions or post-operative infection.

CONCLUSION: Our standardized LASH-technique represents a minimally invasive approach for the treatment of uterine myomas and menorrhagia with a low peri-operative complication rate, short hospital stay a rapid period of convalescence. Special significance of the LASH is that it can be performed on nulliparous patients, patients who have not previously had a vaginal delivery and patients who have had previous abdominal surgery. It provides a minimally invasive alternative to all other methods of total hysterectomy in benign conditions, and has a low peri-operative morbidity.

AUTHOR AFFILIATION: B. Bojahr, G. Tchartchian; Klinik für MIC, minimally Invasive Center, Berlin, Germany

LAPAROSCOPIC SINGLE ENTRY AND HYSTERECTOMY

THURSDAY 27 MAY / SESSION 1
HYSTERECTOMY / 0930-0945

van Herendael BJ

INTRODUCTION: The aim is not to return to the single entry of Raoul Palmer's time but to develop new modalities and to try and find out the limits of laparoscopic surgery.

MATERIAL AND METHODS: To create the optimal conditions to perform routine gynaecological operations through a single entry port enough space is needed to execute a variety of necessary movements as well as enough angulations to be able to approach the target zone from different perspectives. Therefore a port of entry should be larger than the classical entry port allowing for the same high cap trocars permitting the necessary flow of CO₂ gas needed to work with open vagina at the end of the hysterectomy. The classical insufflation pattern has been followed to create a gas balloon in the abdomen of 20mm HG with the classical Veress needle. The longitudinal incision in the skin following the lines of Langer remains the same at 2.5cm. Under the skin the incision in the fascia becomes easier with the abdomen extended and will take some 5cm allowing for finger exploration of the zone under the entry. The deflation of the abdomen is compensated by grasping the fascia edges to introduce the SILS (Covidien Mechelen Belgium). As this introducer has an air inlet the pneumoperitoneum is reinstalled. The introducer has four expandable 5mm ports. One is used to insert the high cap trocar of 12mm. The others have been used to introduce a sealer (Ligasure 5mm or Ligasure Advance 5mm Covidien Belgium), a grasper or a bipolar or a uni-polar instrument. Total laparoscopic hysterectomies have been performed the classical way.

CONCLUSIONS: The Single Entry Port is a valuable alternative to enter the abdomen in gynaecological surgery. Instruments have to be adapted to create the necessary manoeuvre space. As a first step to explore the limits of endoscopic surgery the conclusion is positive but more instrument and entry port developments are necessary to introduce this way of access on a routine daily basis.

AUTHOR AFFILIATION: B. J. van Herendael; Ziekenhuis Netwerk Antwerp Belgium Università dell' Insubria, Varese, Italy

HYSTEROSCOPY AND ASSISTED REPRODUCTION: COLLABORATION NOT COMPETITION

THURSDAY 27 MAY / SESSION 1
HYSTEROSCOPY / 0815-0830

Shawki O

Despite the rising percentage in success rate still many failures occur. Only a third of IVF cycles that are started end in a pregnancy (Society for Assisted Reproductive Technology and the American Society for Reproductive Medicine, 2007). A number of interventions have been proposed to improve IVF outcome, many of which still demand evidence based and their efficacy in improving pregnancy rates remains controversial (Urban et al., 2005; De Sutter, 2006).

One of the promising investigations proposed after IVF failure is outpatient or office hysteroscopy (OH). Hysteroscopy allows reliable visual assessment of the cervical canal and uterine cavity and provides the opportunity to perform therapy in the same setting (Urman et al., 2005). Moreover, routine OH prior to IVF has been suggested by a number of investigators as a minimally invasive and well-tolerated test to ensure normality of the uterine cavity before embryo transfer.

Three non-randomized controlled studies examined the influence of OH on the outcome of the subsequent IVF cycle in patients having their first or subsequent IVF attempt (Mooney and Milki, 2003; Doldi et al., 2005; Chung et al., 2006). The three studies included patients who had OH in the cycle preceding the index IVF cycle as their study group.

Data presented in systematic review and meta-analysis demonstrates a beneficial effect of OH performed prior to ovarian stimulation on the outcome of the IVF cycle in patients having their first or subsequent IVF attempt.

This positive impact on IVF outcome could be related to the ability of OH to reliably detect and potentially treat intrauterine pathologies encountered during the procedure such as intrauterine adhesions, endometrial polyps, submucous fibroids, endometritis or uterine malformations that could interfere with implantation (Oliveira et al., 2003).

These pathologies have been shown to be present in up to 50% of infertile patients (Friedler et al., 1993; Makris et al., 1999; Cunha-Filho et al., 2001; Levi-Setti et al., 2004), and the risk of their presence increases with increasing number of IVF failures (Elter et al., 2005).

The prevalence of intrauterine pathology encountered at hysteroscopy in the five studies included in this systematic review ranged from restoration of a normal uterine cavity is possible during OH with reported good outcome.

Program Abstracts SESSION 1

The fertility-enhancing effect of OH could also be independent of the correction of intrauterine pathology and related to a number of other factors. Firstly, introduction of the hysteroscope through the cervical canal into the uterine cavity could facilitate future embryo transfers. Embryo transfer is the final and most crucial step in IVF (Mansour and Aboulghar, 2002). Evidence exists that IVF outcome is related to the degree of difficulty of embryo transfer.

Cervical canal dilatation has been shown to reduce such difficulty, thus increasing the chance of pregnancy after IVF. In addition, hysteroscopy allows an opportunity to evaluate the direction of the cervical canal and uterine cavity, further optimising the embryo transfer procedure. The temporal relationship between the OH procedure and the subsequent IVF cycle supports this theory. Thus, performing OH just before ovarian stimulation could possibly increase the ease of subsequent embryo transfer

Secondly, OH allows inspection of the uterine cavity for the presence of subtle shape malformations such as arcuate or sub-arcuate uterine configuration and measurement of uterine cavity length. This information is likely to be helpful when planning future embryo transfer. Knowledge of the details of the uterine cavity shape and length makes it easier to deposit the embryo at an optimum depth within the cavity particularly when ultrasound is not employed during the transfer, further enhancing the chances of successful implantation.

Finally, uterine instrumentation during hysteroscopy inevitably causes a degree of endometrial injury and provokes a post-traumatic reaction that involves release of cytokines and growth factors (Sharkey, 1998; Basak et al., 2002), which in turn may influence the likelihood of implantation.

Commencing IVF treatment soon after OH may take advantage of this immunological response. The well-documented increased chance of natural conception after hysterosalpingography (Watson et al., 1994; Nugent et al., 2002; Johnson et al., 2004; Johnson et al., 2005) could also be related to a similar immunological mechanism and lends support to this theory.

In conclusion, systematic review and meta-analysis of published controlled studies showed that OH is associated with improved IVF outcome when performed immediately before commencing an IVF cycle. Furthermore, the economic cost of adding routine Pre IVF Oh will add very minimal compared to the cost of IVF cycles.

AUTHOR AFFILIATION: O. Shawki, M D; Department of Gynecology, Cairo University, Cairo, Egypt

HYSTEROSCOPY IN A DEVELOPING SOCIETY

THURSDAY 27 MAY / SESSION 1
HYSTEROSCOPY / 0830-0845

Hadisaputra W

Examination of uterine cavity with telescope dates back to the 19th century. However, it was not until the 1950's that real interest in hysteroscopy began. With refinements in equipment and advances in technology, hysteroscopy has become a simple, easy, and effective way to inspect the uterine cavity. The clarity and diagnostic accuracy achieved is remarkable. This technique should become part of the repertoire of every modern gynaecologist. Extensive operative hysteroscopic techniques have also developed in the past decade. However, these procedures are more difficult and are associated with much higher morbidity and should only be performed by those who have undergone specific training.

There is a general consensus that hysteroscopy is the current gold standard for evaluating intrauterine pathology. For the operative hysteroscopic procedures it is now generally accepted that for the treatment of intrauterine polyps, myomas, uterine septa, synechiae or endometrial ablation the transcervical hysteroscopic approach is preferred to the transabdominal one. Operative hysteroscopy is a good example of minimal invasive surgery. Nevertheless the operative procedures call for a complex instrumentation set up, special training of the surgeon is required and knowledge of possible complication and their appropriate management are mandatory.

In the developing country like Indonesia, hysteroscopy was introduced in 1993. The role of hysteroscopy, diagnostic and operative, have important role in evaluating the uterine cavity, but until now the use of diagnostic hysteroscopy still limited as a part of women infertility work-up. For the operative hysteroscopy, the usage is still relatively rare. In our society approximately only 20% obgyn doing endocopy in their practice. From those only 5% interest in the field in hysteroscopy. So the effort to increase the use of hysteroscopy is by increasing the number of centers which actively conduct the routine workshop or training in the field of hysteroscopy.

REFERENCES:

1. Bakour SH, Jones SE, et al. Ambulatory hysteroscopy: evidence-based guide to diagnosis and therapy. *Best Practice & Research Clinical Obstetrics and Gynaecology*. 2006; 20(6):953-75.
2. Di Spiezo Sardo A, Taylor A, Tsirkas P, et al. Hysteroscopy: a technique for all? Analysis of 5,000 outpatient hysteroscopies. *Fertil Steril*. 2008; 89:438-43.
3. Lewis BV. Hysteroscopy in gynaecological practice: a review. *Journal of the Royal Society of Medicine*. 1984; 77:235-7.
4. Valle RF. Future growth and development of hysteroscopy. *Obstet Gynecol Clin North Am*. 1988; 15(11):111-26
5. Luo Xiping, Lim Chi Eung Danforn, Li Li, et al. Hysteroscopic appearance of endometrial cavity after microwave endometrial ablation. *Journal of Minimally Invasive Gynecology*. 2010; 17(1):30-6.
6. Chan SCS, Fraser IS. The role of diagnostic hysteroscopy in modern gynaecological practice. *HKMJ*. 1995;1:161-6.
7. AAGL Practice Report: Practice Guidelines for Management of Intrauterine Synechiae. *Journal of Minimally Invasive Gynecology*. 2010; 17(1):1-7.
8. Campo R, Van Belle Y, et al. Office hysteroscopy. *Human Reproduction Update*. 1999; 5(1):73-81
9. Camanni M, Bonino L. Hysteroscopy management of large symptomatic submucous uterine myomas. *Journal of Minimally Invasive Gynecology*. 2010; 17(1):59-65.
10. Clark TJ, Bakour SH, et al. Evaluation of outpatient hysteroscopy and ultrasonography in the diagnosis of endometrial disease. *Obstet Gynecol*. 2002; 99:1001-7.
11. Trew GH. Hysteroscopy and hysteroscopic surgery. *Current Obstetrics & Gynaecology*. 2004; 14:183-90.
12. Molinas CR, Campo R, et al. Office hysteroscopy and adenomyosis. *Best Practice & Research Clinical Obstetrics and Gynaecology*. 2006; 20(4):557-67.

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Program Abstracts SESSION 1

PLUSSES AND PITFALLS OF HYSTEROSCOPIC STERILIZATION

THURSDAY 27 MAY / SESSION 1
HYSTEROSCOPY / 0845-9000

Rosen D

Hysteroscopic sterilization has emerged as a viable alternative to traditional tubal ligation since the first cases in 2000. With 2 products, ESSURE and Adiana now on the market in Australia it is timely to review the process of hysteroscopic sterilization. This lecture looks briefly at the available products and explores the benefits of the procedures for our patients, ourselves and the community at large. Technical tips and tricks will also be presented to all those who wish to take up these methods of sterilization.

AUTHOR AFFILIATION: D. Rosen; Sydney Women's Endosurgery Centre, St George Hospital, Sydney, NSW, Australia

ENDOSCOPIC MANAGEMENT OF UTERINE ANOMALIES

THURSDAY 17 MAY / SESSION 1
HYSTEROSCOPY / 0915-0930

Joseph K, Kurian R

The presence of Mullerian anomalies results in several uterine abnormalities from size, shape and even number of cavities. Outflow tract abnormalities may result in menstrual cycle problems. If not corrected problems from amenorrhea, dysmenorrhea and adnexal masses may result. Smaller defects may result in fertility problems. The advent of better diagnostic aids like 3D Ultrasound and MRI scans have helped in easier diagnosis. The use of the laparoscope and the hysteroscope has simplified the treatment. This presentation attempts to assess uterine anomalies and their treatment using the endoscope. From simple septae to complete double uteri with a single body to rudimentary uterine horns and cryptomenorhea are discussed. Several problems faced and treatment dilemmas have been highlighted.

AUTHOR AFFILIATION: Dr A. K. Joseph, Dr R. Kurian; Joseph Nursing Home, Chennai, India

Program Abstracts SESSION 2

OVARIAN SUSPENSION TO PREVENT ADHESIONS

THURSDAY 27 MAY / SESSION 2
ADHESIONS / 1115-1130

East M

OBJECTIVE: To minimise tubo-ovarian adhesions for exclusionary surgery of endometriosis.

METHOD: A surgical technique which includes fastidious attention to haemostasis, temporary relocation of the ovaries from the deep pelvis and installation of a liquid adhesion barrier. The audited results of 214 patients between October 2006 and February 2010 undergoing excision surgery for endometriosis and relocation of ovaries.

CONCLUSION: In spite of there being a large surface area denuded of peritoneum following most cases of exclusion surgery for endometriosis, it is possible to leave patients with a minimal legacy of adhesions.

AUTHOR AFFILIATION: M. East; Oxford Clinic & Christchurch Women's Hospital, Christchurch, New Zealand

THE ROLE OF SECOND LOOK LAPAROSCOPY

THURSDAY 27 MAY / SESSION 2
ADHESIONS / 1130 – 1145

Maher P

Fact is that 40% of all adults in the western world will have some form of abdominal surgery in their lifetime. Why would one consider a second look laparoscopy? Most important is the breakdown and remove any adhesions as the result of primary surgical intervention. Some discussion will take place as to the role of adhesion barriers.

Questions arise as to whether we should wait for an indication to perform a second look laparoscopy. Indications may include ongoing symptoms, new symptoms but we need to consider ethical issues if we are to consider this routine in some incidences. Most patients with intra abdominal adhesions will remain asymptomatic but 4% of these patients will be admitted with adhesion related complications and a further 27% may have possible adhesion related complications. It is important to remember that if further surgery is required 40% of these patients will also be complicated by adhesions. Most abdominal structures are involved by adhesion formation. These include omentum, small intestine, abdominal wall and colon.

The consequences of such adhesions may include bowel obstruction, chronic abdominal pain and infertility. The types of surgery that may result in adhesion formation will be discussed during the presentation. Despite much discussion it is important to know that laparoscopic verses open surgery resulted in no significant differences between the two approaches re operations for adhesions.

As a result of these studies one must question the place of second laparoscopy.

AUTHOR AFFILIATION: A/Prof. P. Maher; Department of Endosurgery, Mercy Hospital For Women, Heidelberg, Victoria, Australia

Program Abstracts SESSION 2

PIONEERING TALES OF AN AUSTRALIAN GYNAECOLOGICAL ONCOLOGIST

THURSDAY 27 MAY / SESSION 2
ONCOLOGY / 1100-1115

Jobling T

The application of minimally invasive surgery in gynaecological oncology in the late 1980's was viewed by most surgeons as inappropriate at best and almost medically negligent at worst. Initial efforts to utilize laparoscopy were hindered by philosophical concerns about a lack of adherence to the perceived principles of cancer surgery as well as significant deficiencies in technical equipment. Poor light sources, low flow rate non-heated insufflation, as well as primitive one chip cameras made advanced radical surgery a great challenge. An overview of the early surgical efforts and interesting complications as well as thoughts on current applications will be addressed.

AUTHOR AFFILIATION: T. Jobling; Monash Medical Centre, Melbourne, Vic, Australia

TRAINING IN ADVANCED GYNAECOLOGICAL ENDOSCOPY FOR ONCOLOGY

THURSDAY 27 MAY / SESSION 2
ONCOLOGY 1115-1130

Salfinger S

The increasing role of laparoscopic surgery in Oncology requires a new and unique skill set. Endometrial cancer is increasingly being treated primarily via laparoscopic approach (including lymphadenectomy). Early cervical cancer and treated with laparoscopic radical hysterectomy and pelvic lymphadenectomy is coming into use. Staging or re-staging of ovarian carcinoma primarily for non-epithelial ovarian tumours and borderline tumours is used increasingly. There is also the role of laparoscopy in pre- aaparotomy assessment of ovarian malignancy and second look laparoscopy in assessment of trials.

The challenge is in acquiring these laparoscopic skills while then operating on difficult cases of malignancy. The limits of the college subspecialty training program can make it difficult to obtain the necessary skills in the time required as one must also become proficient in complex open surgery, bowel, bladder and urinary tract surgery as well. There is undoubtedly a benefit form entering oncology subspecialty training with and adequate laparoscopic skill set already acquired so that one can further develop and adjust these to suit advanced oncologic surgery.

AUTHOR AFFILIATION: S. Salfinger; Gynaecologic Oncologist, WA Gynaecologic Cancer Service, KEMH and SJOG Hospitals, Perth, WA, Australia

ROBOTICS IN THE MANAGEMENT OF GYNECOLOGICAL ONCOLOGY

THURSDAY 27 MAY / SESSION 2
ONCOLOGY / 1145-1200

Lee C-L

INTRODUCTION: Gynecologic surgeons have been the pioneers of laparoscopic surgery. They developed laparoscopy, originally a diagnostic tool, into a safe and effective operative approach for management of the gynecologic surgery.

The use of robotic technology to facilitate laparoscopic procedures has increased over the past decade. In numerous studies, it has been shown to be a safe and effective alternative to conventional laparoscopic surgery in a variety of surgical disciplines.

There is currently only one robotic surgical platform commercially available and FDA approved since April 2005 for performing gynecologic procedures – the daVinci surgical system (Intuitive Surgical Inc, Sunnyvale, Calif.), which was first introduced in 1999.

MATERIALS/METHOD: The surgeries were performed with the da Vinci system (Intuitive Surgical, Inc.). We collect data retrospectively including docking times, operative times, estimated blood loss, length of hospital stay, lymph node yields, and complications.

RESULTS: Six patients with early-stage cervical cancer and underwent robotic-assisted staging laparoscopy from July 2007 to December 2008. The median lymph node count was 25.5 (range, 20 to 28). Mean operating time was 264 minutes (range, 215 to 309). The average estimated blood loss was 200mL. Another six patients with early-stage endometrial cancer underwent robotic-assisted staging laparoscopy from July 2007 to August 2008. The median lymph node count was 24.8 (range, 9 to 30). Mean operating time was 200 minutes (range, 143 to 261). The average estimated blood loss was 178mL.

No conversion was required, no intraoperative or postoperative complications occurred. All patients in this group were alive and free of disease at the time of last follow-up. To date, we are the first institute to perform robotically -assisted laparoscopy in treatment of gynecologic oncology in Taiwan.

CONCLUSIONS: The brilliance of this technology is simple: by restoring dexterity, 3D vision, and autonomy to the abdominal surgeon while leveraging the patient outcome advantages that come from minimally invasive techniques, better surgical outcomes will be achieved.

THE ROLE OF THE LAPAROSCOPE IN ENDOMETRIAL CANCER

THURSDAY 27 MAY / SESSION 2
ONCOLOGY / 1200-1215

Nam J-H

OBJECTIVES: The aim of this presentation is to compare laparotomy and laparoscopy in the surgical management of endometrial cancer in terms of surgical outcomes and survival outcomes.

Program Abstracts SESSION 2 / PLENARY / SATELLITE MEETING

METHODS: We reviewed the meta-analysis of randomized controlled trials which compared laparoscopy and laparotomy in surgical management of endometrial cancer and a recent large randomized controlled trial conducted by Gynecologic Oncology Group. We also analyzed our 10-year experiences on laparoscopic surgery in endometrial cancer.

RESULTS: In meta-analysis of randomized controlled trials, laparoscopy does not compromise disease free survival and overall survival and does not increase intraoperative complications. Laparoscopy has disadvantages in operative time but has advantages in blood loss, peri-operative hemoglobin level change, transfusion requirement, hospital stay and postoperative complications. A recent large randomized controlled trial showed that laparoscopic surgical staging for uterine cancer is feasible and safe in terms of short-term outcomes, and results in fewer complications, shorter hospital stay, and better quality of life. However, the long term outcomes and pattern of recurrence are still unknown. During the last 10 years, laparoscopic procedures have been performed in over 480 patients with early-stage endometrial cancer in our center. We have found that the surgical and oncologic outcomes were similar or even better compared to conventional laparotomic procedures.

CONCLUSIONS: Laparoscopic surgery has many benefits over conventional abdominal approach in patients with endometrial cancer. These include less blood loss, less transfusion requirement, shorter length of hospital stay, less postoperative complication and improved quality of life. In addition, it appears that the risk of cancer recurrence does not increase with a laparoscopic approach. With advances of laparoscopic instruments and surgical skills, laparoscopic surgery is becoming a dominant paradigm in the surgical management of endometrial cancer.

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PLENARY LECTURE

THE DANIEL O'CONNOR LECTURE: THE ROLE OF LAPAROSCOPIC SURGERY IN NON UTERINE OR CERVICAL CANCER

THURSDAY 27 MAY / PLENARY LECTURE
1230-1300

McCartney A

In the last thirty years there has been an inevitable creep of the endoscopic to replace the open approach in most branches of surgery. This change has been driven under the banner of enhanced vision for the surgeon, less pain and morbidity, reduced hospital stay and earlier return to normal activity for the patient. Conspiring against this advance, usually by hospital economists and some outpaced surgeons, is the familiar cry of longer procedure times and increased procedural costs. Advances have usually been sustained by improved surgical skills and tools, supported by results of comparative studies showing improved patient outcomes.

Gynaecologists have long been using laparoscopes, realising early that trendelenberg tilt of the patient enhanced view of the female pelvic organs. Early exponents used it largely as a diagnostic tool. The advent of improved camera technology as in other disciplines of surgery heralded the beginnings of therapeutic laparoscopic surgery. Initial surgical exploits in gynaecologic surgery

were largely confined to the adnexae, with sterilisation procedures and treatment of tubal ectopic pregnancy. In 1988 the first laparo-vaginal hysterectomy was performed by Dr Harry Reich, this subsequently lead to Total and supracervical laparoscopic hysterectomy. It was not until the early 1990's that Gynaecologists became aware of the possibilities of this surgical approach. The history of the application of this technique to the management of endometrial carcinoma is well known to this society after many presentations on this subject over the last fifteen years. Less well known is the use of laparoscopic surgery in the management of cervical cancer and ovarian cancer.

The introduction of Total Laparoscopic Radical Hysterectomy and laparoscopic Pelvic and Paraortic Lymph Node biopsy and dissection will be discussed and illustrated.

Laparoscopic surgery in the Management of Ovarian Carcinoma will be discussed under the following headings.

1. Laparoscopic approach to the Adnexal Mass
2. Laparoscopic management of Borderline Ovarian tumours
3. Laparoscopic management of Early Stage Ovarian cancer
4. Laparoscopic surgery in the management of Advanced Ovarian cancer
5. Prophylactic laparoscopic surgery in patients at increased risk of developing ovarian cancer

AUTHOR AFFILIATION: A. J. McCartney FRCOG, FRANZCOG, CGO. Perth, WA, Australia

SATELLITE MEETING

ADENOMYOSIS 2010 – DID WE LEARN FROM THE PAST?

THURSDAY MAY 27 / MEETING OF THE GERMAN
ENDOSCOPIC SOCIETY (AGE) / 1430-1445

Mettler L

Endometriotic lesions have to be surgically destroyed, excised, enucleated or resected. From the surgical point of view, hysterectomy is currently considered the most and only effective treatment for symptomatic adenomyosis. Conservative surgery involving endometrial ablation, laparoscopic myometrial electrocoagulation or excision has proven to be effective in less than 50% of patients. Some surgeons find it helpful to remove the upper portion of the uterine cavity but this allows no further possibility of pregnancy. In patients who in spite of adenomyosis wish to have children it is possible to perform a myometrial biopsy by percutaneous or ultrasound-guided needle biopsy, define the location of the adenomyosis and then carry out a laparoscopic excision.

MATERIAL AND METHODS: 1. Endometriotic lesions were biopsied and the pathohistological outcome was compared to the suspected diagnosis in 216 patients. 2. In the university clinic of Kiel we performed the histological diagnosis either by ultrasound guided needle biopsy or by endometrial resection or by needle biopsy during laparoscopy. In 35 patients the diagnosis of adenomyosis was pre-operatively made.

RESULTS: 1. In black and red lesions, including endometriomas, the suspected diagnosis was confirmed in >90% of cases. In white lesions, however, the diagnosis could only be verified in 53% of cases. 2. In all patients we performed a laparoscopic resection partly combined with a hysteroscopic resection in cases of menorrhagia.

Program Abstracts SESSION 4

CONCLUSION: 1. Purely morphological criteria are not sufficient for the diagnosis of endometriosis but these laparoscopic findings are still our most reliable points of reference. 2. Vaginal ultrasound combined with transabdominal or transvaginal myometrial biopsy established the diagnosis of adenomyosis in 35 patients. Endometrial resection and myometrial reduction or excision reduced the need for hysterectomy in up to 35% of these patients. The number is small but proves that besides hysterectomy other surgical options do exist.

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N.O.T.E.S. IN GYNECOLOGY

THURSDAY 27 MAY / SESSION 4 / 1600-1620

Tinneberg H-R, Hackethal A

From the very beginning of endoscopic surgery it was one of the aims of the surgeons not to produce big scars but to remain fairly invisible for the outside observer. In an attempt to stress this aim the NOSCART consortium, a collaborative effort of the American Society for Gastrointestinal Endoscopy and the Society of American Endoscopic Surgeons joined. The abbreviation of NOSCART means Natural Orifice Surgery Consortium for Assessment and Research and allows quite obvious association with "no scar". The relevant method to deal with is called NOTES and means Natural Orifice Transluminal Endoscopic Surgery. It seems that using an accidental perforation of the stomach to remove an appendix has started a new way of thinking. It now seems quite reasonable to discuss approaches like transgastric, transcolic, transvesical and transvaginal as ways to improve patients well being. Avoiding injury to the abdominal wall results in a less invasive procedure, thereby causing less associated stress, reducing reactive cortisol, TNF-, IL-6 and CRP increase. Less tissue trauma will result in a better immune response and may cause less adhesions.

Gynecologists have practised vaginal surgery for centuries and diagnostic endoscopy started with culdoscopy as a tool to describe the tubes and ovaries as well as the pouch of Douglas. It is therefore more than natural to choose the transvaginal route for any type of surgery in the abdomen. This is even more so as a few years ago transvaginal hydro laparoscopy TVHL was introduced as an office procedure to allow immediate testing for tubal pathology. It was even possible to demonstrate endometriotic implants in the pelvis visualise adhesions by separating them via the distension fluid. The dye test could be performed as well as a limited salpingoscopy. Under conditions of available anaesthesia this method could also be used for minor interventions like ovarian biopsies or sterilisations. Due to the application of straight lens optics it was however impossible to visualise the anterior wall of the uterus or the bladder roof.

Meanwhile, it has been established to perform various procedures via this route by either using flexible optics or an optic with varying angles from 0° – 90° (Chameleon, STORZ).

This allows to overcome the promontory as major obstacle when leaving the pelvis to approach the upper abdomen. In case of cholecystectomy the NOTES procedure would prevent the necessity to have an several centimetre long abdominal incision to finally remove the gall bladder in a bag. Going the vaginal way may even involve a hybrid technique whereby not all instruments have to be introduced through the vagina but that at least one 5mm instrument and a fixation of the gall bladder to the abdominal wall by a stitch through the abdominal wall immediate inferior to the lowest rib.

In our hands it has proven successful to perform this procedure as an interdisciplinary intervention between surgeons and gynecologists.

When discussing new approaches to replace well established procedures like conventional laparoscopic cholecystectomy it is surprising to see the resistance within the medical community. German gynecologists had been interviewed what they would assume their patients would think about scarless surgery. Their overall response was that most patients would not want any such procedure. However, when patients were asked they responded much more favourable even allowing a higher risk when using NOTES procedures.

In conclusion: NOTES is a new approach even though especially in case of cholecystectomy both procedures like culdotomy as well as endoscopic cholecystectomy are well established procedures. It is now the combination of the two that causes headaches. Since we have gained very positive responses from our patients we can only advocate that surgeons with sufficient experience in endoscopic surgery should start this approach as an interdisciplinary intervention.

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SINGLE-PORT LAPAROSCOPY IN GYNECOLOGY

THURSDAY 27 MAY / SESSION 4 / 1620-1640

Escobar PF

Laparoscopic single-site surgery (LESS), also known as single-port surgery, is a novel, rapidly advancing minimally invasive technique. Recent data in the general surgery and urology literature has demonstrated technical feasibility and reproducibility of this technique when utilized for a variety of procedures, including cholecystectomy, appendectomy, nephrectomy and hemicolectomy. These early reports indicate that LESS is a promising technique that also results in improved cosmesis for patients, and in many cases, results in a shorter convalescence period and decreased post-operative analgesia requirements when compared to those treated with conventional laparoscopic approaches. The objective of this presentation is to describe current research and data with single-port and single-port robotic surgery in gynecology and gynecologic oncology.

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THE 'COSMETIC GYNAECOLOGIST'

THURSDAY 27 MAY / SESSION 4 / 1640-1700

Turner D

There is much debate regarding the increased interest for gynecologists in providing cosmetic procedures for our patients.

This will be presented in such a way to ask:

- 1 Should gynecologists provide such services?
- 2 What services are appropriate?
- 3 How should we go about it?

The information is based on my own experience and that of numerous colleagues in the US.

There is little in the literature other than opinions.

Program Abstracts SESSION 5

HOW TO PLAN THE SURGICAL APPROACH TO SEVERE ENDOMETRIOSIS

FRIDAY 28 MAY / SESSION 5 / ENDOMETRIOSIS
0800-0815

Maier P

Who knows the best way to plan the surgical approach for endometriosis. Those doing surgery for the DIE patient, surgical techniques change the more experienced one becomes.

The following presentation reflects one person's journey. At the initial consultation, the history of symptoms is very important. These include menstrual disturbance, period pain and bowel pain and or disturbance of bowel function and blood in the bowel. Differential diagnosis course of these symptoms would include irritable bowel syndrome which is often offered to the patient as the total cause. The significance of symptoms are sometimes hard to determine. Period pain is controlled by antiprostaglandins, NSAID's and analgesics. Dyspareunia can be due to adenomyosis which could be diagnosed by ultrasound or MRI or Pouch of Douglas disease. It can also have psychosocial causes. Bowel pain, constipation, diarrhoea, pre period with a period of post period may represent endometriosis or irritable bowel syndromes. Urinary symptoms are less common. A very precise examination of the patient is important including vaginal examination, rectal examination and occasionally bimanually examination with rectum and vagina. It is important to paint a mental picture of the pathology in the pelvis as the result of examination and the history. Due to variation in symptoms involvement of other practitioners such as naturopaths, Chinese practitioners, massage therapists and psychologists maybe important. Share the load as continuing management of these patients is complex. Investigations are limited and include ultrasound, MRI, rectal ultrasound. There are many reports about the accuracy of each of these tests. At this stage evidence suggests that vaginal ultrasound or MRI can give the same result in terms of determining the involvement of pelvic structures with endometriosis. Presentation will involve discussion concerning non genital tract involvement with endometriosis.

I believe it is always important to consider the possibility of a planning laparoscopy. It will help with the informed consent process and the need to involve other surgeons in the patients management. It is important to have a close relationship with a colorectal surgeon and for that person to be involved in the management of patients when one thinks the rectum maybe involved. If there are symptoms suggesting urinary tract involvement the urologist should also be involved in the management of the patient. It is important that the patient have complete understanding of the disease process and the implications of treatment and non treatment and the complications associated with non treatment. Full consent is critical in this type of gynaecological surgery.

In conclusion a multi-discipline approach is essential. A sound knowledge of the disease and the surgery required to treat the patient is also essential. Appropriate informed consent is imperative and hopefully the patient will have an excellent outcome.

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MULTIDISCIPLINARY CONSULTATION FOR MANAGEMENT OF DEEP INFILTRATING ENDOMETRIOSIS

FRIDAY 28 MAY / SESSION 5 / ENDOMETRIOSIS
0815-0830

Dequesne J, Nisolle M, Foidart J-M

Most of the time the way of every patient suffering of deep infiltrating endometriosis is very complicated and implicate to visit a lot of different specialists in medicine.

Except Gynaecologist very few of them know very well endometriosis. For this reason gynaecological surgeons have very often to face difficult non expected situation during surgery and has to call in last minute different specialists including digestive surgeon, urologist and so on.

To avoid improvisation, we have decided to organise a consultation with all the different specialists as reported in table 1, radiologist, urologist, digestive surgeon, psychologist, pathologist and gynaecologist.

These specialists are fond in endometriosis after special education The consultation Endo Experts is organised as follow:

The patient or her gynaecologist contact Endo Experts Center by phone or mail is then she fill up a questioner with all the history and her actual situation.

He is then convocate to under go the consultation where every speciality is represented under the coordination of the gynaecological surgeon.

In the same consultation every radiological and clinical examination are performed.

In case of psychological examination the patient is seen later on.

That means that in the end of the consultation an instant report is established and send to the patient or/and the physician for a proposition of treatment.

The advantage of this consultation is avoid the patient to waste time by looking after all the different specialist and she can have immediate access to all experts in endometriosis.

Second advantage is that in case of operation different surgeon, digestive, urologist and gynaecologist know already the patient and are ready to work together.

Third advantage is that these specialists become all experts by continued education to develop his knowledge of endometriosis.

For this purpose the Center of Endo Experts have organised gentleman agreement with different center of expertise. For example the AGES Verona, L.minelli, CENTI Clermont-Ferrand, G. Mage and M. Canis, University of Liege, M. Nisolle and J.-M. Foidart, Hirslanden Zürich, M. Possover.

In conclusion multi-disciplinary consultation Endo Experts has demonstrated after 2 years a clear benefit for patients and physicians.

AUTHOR AFFILIATION: J. Dequesne, M. Nisolle, J.-M. Foidart; Clinique Cecil, Lausanne, Switzerland & University of Liège, Belgium

Program Abstracts SESSION 5

IS NERVE-SPARING SURGERY POSSIBLE IN THE TREATMENT OF SEVERE ENDOMETRIOSISFRIDAY 28 MAY / SESSION 5 / ENDOMETRIOSIS
0845-0900

Lam A

Endometriosis is a chronic disease which can cause debilitating pain and infertility and consequently severely impact the quality of life of patients. Complete excision of endometriosis has been shown to be effective in producing medium to long-term pain relief and improving fertility outcomes.

While there has been a call for 'aggressive excisional surgery' in any patient who wishes to retain fertility and who has pain that has not responded well to previous medical or surgical therapy', nerve-sparing surgery is desirable and achievable in the treatment of severe endometriosis.

The objectives of this presentation are to:

- Recall the pelvic autonomic innervation.
- Examine the literature evidence with regard to the variety of surgical techniques in the treatment of severe endometriosis.
- Understand the concept of 'nerve-sparing' pelvic surgery.
- See how this can be achieved through a thorough understanding of the pathological behaviour and the surgical techniques for excision of severe endometriosis.

PELVIC AUTONOMIC INNERVATION: From the inferior aspect of the celiac plexuses at the level of the Superior Mesenteric Artery, 2-3 inter-mesenteric nerves descend over the antero-lateral surface of the aorta, receiving fibers from Inferior Mesenteric and lumbar sympathetic ganglia.

At the bifurcation of the aorta, they join to form the Superior Hypogastric Plexus. This splits into 2 trunks just below the sacral promontory – Hypogastric nerves or Inferior hypogastric plexus.

These pass downward near the sacral end of each uterosacral ligament, and then forward over the lateral aspect of the rectal ampulla and upper vagina. In this vicinity, they are known as the Pelvic Plexuses. They receive branches from the (1) sacral ganglia of the sympathetic trunk and (2) parasympathetic fibres from the S2,3,4 sacral spinal nerves.

EVIDENCE: In dealing with deeply infiltrative endometriosis involving the uterosacral ligaments, obliterating the pouch of Douglas with or without involvement of the recto-sigmoid, endometriosis surgeons have adopted almost the same 'radical philosophy' as the way oncologists have treated pelvic cancer.

There is limited data from a small number of non-randomized studies raising concerns about possible damage to the pelvic autonomic nerves and hence pelvic organ dysfunction from radical pelvic surgery. Most, if not all of the evidence, have examined different surgical techniques and used invalidated questionnaires.

Aggressive surgical approach may cause possible significant effects on bladder, bowel and sexual function.

CONCEPT OF NERVE-SPARING EXCISION OF SEVERE ENDOMETRIOSIS:

Indeed, it is because of these concerns that surgeons have adopted nerve-sparing techniques in radical surgery for cervical, bladder and rectal malignancies in the last decade. In this surgical concept, the surgeon aims to preserve the inferior hypogastric plexus, the rectal sympathetic fibres of the upper and lower mesorectum and the pelvic splanchnic nerves during dissection in the mesorectal planes.

NERVE-SPARING EXCISIONAL SURGERY FOR SEVERE ENDOMETRIOSIS:

The principles of nerve-sparing surgery for severe endometriosis are illustrated using several short DVD clips. The incidence, types and effects of nerve damage arising from the author's prospective series of over 440 women treated between 2004 and 2008 will be discussed.

CONCLUSION: As we become more 'radical' in the surgical treatment of severe endometriosis, it is imperative that we should have detailed knowledge of pelvic anatomy and pelvic autonomic innervations. We should examine our current surgical techniques and be aware that aggressive excisional surgery of endometriosis may result in significant morbidity thus far not yet evaluated on bladder, bowel and sexual function.

REFERENCES:

1. Redwine DB and Wright JT (2001) Laparoscopic treatment of complete obliteration of the cul-de-sac associated with endometriosis: long-term follow-up of en bloc resection. *Fertil Steril* 76,358 – 365.
2. Ercoli A, Delmas V, Gadonneix P, Fanfani F, Villet R, Paparella P, Mancuso S and Scambia G (2003) Classical and nerve-sparing radical hysterectomy: an evaluation of the risk of injury to the autonomous pelvic nerves. *Surg Radiol Anat* 25,200 – 206.
3. Ford J, English J, Miles WA and Giannopoulos T (2004) Pain, quality of life and complications following the radical resection of rectovaginal endometriosis. *Br J Obstet Gynecol* 111,353 – 356.
4. Hoeckel M, Konecny MA and Heubel CP (1998) Liposuction-assisted nervesparing extended radical hysterectomy: oncologic rationale, surgical anatomy, and feasibility study. *Am J Obstet Gynecol* 178,971 – 976.
5. Darai E, Thomassin I, Barranger E, Detchev R, Cortez A, Houry S and Bazot M (2005) Feasibility and clinical outcome of laparoscopic colorectal resection for endometriosis. *Am J Obstet Gynecol* 192,394 – 400.
6. Landi S et al. (2006) Laparoscopic nerve-sparing complete excision of deep endometriosis: is it feasible? *Human Reproduction* 21, 774 – 781.
7. Raina R et al. Female sexual dysfunction: classification, pathophysiology and management. *Fertil Steril* 2007;88:1273 – 84.
8. Vercellini P, Somigliana E, Viganò P, Abbiati A, Barbara G, Crosignani PG. Surgery for endometriosis-associated infertility: a pragmatic approach. *Hum Reprod*. 2009 Feb;24(2):254-69.
9. Vercellini P, Crosignani PG, Abbiati A, Somigliana E, Viganò P, Fedele L. The effect of surgery for symptomatic endometriosis: the other side of the story. *Hum Reprod Update*. 2009 Mar-Apr;15(2):177-88.
10. Jacobson TZ, Barlow DH, Garry R and Koninckx P (2004a) Laparoscopic surgery for pelvic pain associated with endometriosis (Cochrane Review). In *The Cochrane Library*, Issue 3. John Wiley & Sons Ltd, Chichester, UK.

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OUTCOMES AFTER RADICAL TREATMENT OF DEEP INFILTRATING ENDOMETRIOSISFRIDAY 28 MAY / SESSION 5 / ENDOMETRIOSIS
0900-0915

Nisolle M, Brichant G, Locci R, Foidart J-M

The ability to perform complete eradication of endometriotic lesions may have significant influence on the recurrence of the disease. According to the literature, the risk of recurrence is found to be lower in cases of bowel resection (anterior wall excision and segmental rectal resection) than in

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cases of dissection of the rectal wall. But on the other hand, radical excision of deep infiltrating endometriosis (DIE) must be balanced to the morbidity of rectal procedures. For example, the risk of anastomotic leak in cases of segmental rectal resection is not detailed in the literature. Global morbidity of 7% for rectal procedures has been described by colorectal surgeons and therefore women should have detailed counselling about the risks of major complications and recurrence. For some authors, the effect of radical surgery on long-term pain relief in cases of DIE is questionable. The laparoscopic treatment of bowel endometriosis on fertility has also been proved beneficial as subsequent fertility rate has been found to be higher in cases of colorectal segmental resection than in absence of bowel resection. But on the other hand, in patients without associated major infertility factors, surgical resection of rectovaginal endometriosis without bowel resection did not improve the pregnancy outcome as suggested by some authors. It seems that surgeons performing radical surgery claim that it improved postoperative pelvic pain and infertility but on the contrary, surgeons not in favour of radical surgery did not observe such beneficial effects. Randomized clinical trials are needed to clearly demonstrate the benefits of radical surgery.

Even if radical surgery is associated with symptom relief, improvement in quality of life and increased postoperative fertility, it should be performed only in Referral Centers where specialists of different disciplines can collaborate. This will insure an optimal service and limit complications and postoperative recurrence.

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SURGICAL APPROACH TO COLORECTAL ENDOMETRIOSIS

FRIDAY 28 MAY / SESSION 5 / ENDOMETRIOSIS
0915-0930

Tsaltas J

Endometriosis is a significant benign gynaecological disorder. It is a chronic disease found in women of reproductive age. It has a suspected prevalence of 8–15%. Surgery for colorectal endometriosis has evolved over the last twenty years. There is still debate about the degree of surgery that is required for colorectal endometriosis.

Symptoms of endometriosis include dysmenorrhoea, ovulation pain, chronic pelvic pain, infertility and deep dyspareunia. Endometriosis of the bowel is estimated to affect 5.3% of all women affected by endometriosis. The most common site of bowel endometriosis is in the rectum, the recto/sigmoid and sigmoid. These areas alone account for 70–93% of all bowel lesions.¹

The symptoms of rectal endometriosis can be very severe. In some cases symptoms can be debilitating particularly in the days leading up to and during menstruation. One of the most significant symptoms of rectal and sigmoid invasion by endometriosis is rectal pain on defecation (dyschezia). Rectal bleeding during menstruation has been classically described but is not commonly associated with invasive disease.

In this talk I will look at the surgical approaches to colorectal endometriosis. An integral part of surgery is consent for such a procedure. I will discuss the multidisciplinary approach to this type of problem. Surgery for rectal/

sigmoid endometriosis can involve (1) shaving the endometriosis off the rectal wall (2) full thickness excision of the anterior rectal wall (usually with a trans anal stapler) and (3) segmental resection of the bowel.

I will discuss surgical planning and surgical approach to this problem. The presentation will also discuss complications for this surgery.

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THE ROLE OF URODYNAMICS IN PELVIC FLOOR SURGERY

FRIDAY 28 MAY / SESSION 5
PELVIC FLOOR PROLAPSE 1 / 0840-0900

Rosamilia A

Medicare Australia data from 1994 to 2008 show that there was a 75% increase in surgery for stress urinary incontinence (SUI) over this period, from 4000 to nearly 7000 cases a year.

Medicare Australia data from 1994 to 2008 show the number of all urodynamic studies in females increased from 1637 to 1959 which is an almost 20% increase with a greater than 50% in the older than 65 year old age group.

Urodynamic assessment is recommended in clinical studies for surgical treatment of SUI, and optional in clinical studies evaluating medical and non-surgical treatment. Urodynamic assessment is recommended in patients who will undergo surgery for SUI, and optional in young patients (premenopausal), with normal frequency, no urgency, pure SUI symptoms, with at least one pregnancy, and no voiding dysfunction symptoms or residual more than 100ml. (IUGA Research and Development Committee)

The aim of urodynamic study (UDS) in the evaluation of urinary incontinence is to demonstrate incontinence objectively and differentiate between types of incontinence and help to select the treatment most likely to be successful. Other conditions such as bladder overactivity and voiding dysfunction are diagnosed pre-operatively and may change counselling and decision-making.

However, it has long been recognized that there is a considerable discrepancy between patients' symptoms and the urodynamic diagnosis. Despite being widely used, the value of the urodynamic study in the diagnosis and management of incontinence has been controversial.

Recent studies including patient preference studies have shown a preference for a diagnosis prior to intervention.

An example of the value of urodynamics in surgery for stress urinary incontinence is the finding of a higher failure rate with lower urethral closure pressure or low leak point pressure. This is illustrated in a higher failure rate with obturator tape compared with retropubic tapes in intrinsic sphincter deficiency.

The role of urodynamic assessment prior to pelvic organ prolapse surgery is also controversial. The concept of occult stress incontinence will be discussed and results of a midurethral sling intervention study will be

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presented. It is of interest that the trochar anterior mesh devices are associated with more post-operative SUI than conventional colporrhaphy.

A number of recent studies suggest that adding urodynamic investigation to the diagnostic work-up of patients undergoing prolapse surgery does not improve treatment outcome but may increase satisfaction.

This does not mean that urodynamic investigation should be abandoned. Even though they may not alter clinical management, pre-operative tests allow appropriate counselling of the patients, a matter which should not be underestimated in terms of satisfaction and litigation. However, until further evidence has been provided one suggestion is to discuss with the patient prior to prolapse surgery that urodynamic investigation may be informative especially in the presence of lower urinary tract symptom but is nonetheless optional.

PLENARY LECTURE

MENSTRUATION, ENDOMETRIOSIS AND STEM CELLS

FRIDAY 28 MAY / PLENARY LECTURE / 1030-1100

Garry R

OBJECTIVES: To learn more of the dynamics of the endometrium during menstruation in order to better understand the dynamics and aetiology of endometriosis by:

- 1 Studying the hysteroscopic, histological, immunohistochemical and scanning electron microscopic appearances of benign endometrium throughout the menstrual cycle, particularly during the phase of active menstruation
- 2 Studying the dynamics of endometriotic and adenomyotic lesions during the menstrual cycle
- 3 Studying the dynamics of early heterotrophic endometrial transplants in a large animal model.

METHODS: Pressure controlled hysteroscopy was undertaken on 14 patients at various stages of the bleeding phase of the menstrual cycle.

Subsequent conventional and immunological histology along with scanning electron microscopic examinations were performed on endometrial samples removed during or immediately after these hysteroscopic procedures. These findings were correlated with the appearances of endometrium from 34 women obtained at other stages of the menstrual cycle.

Five of the 14 menstruating women had evidence of endometriosis and 2 had adenomyotic lesions. These pathologies were biopsied and sampled at the same time as their corresponding endometrial samples.

Samples of human endometrium obtained at curettage were transplanted into the relatively immuno-privileged environment of the anterior chamber of sheep eyes to determine the early dynamics of ectopic "endometriotic" transplants.

RESULTS: Pressure-controlled hysteroscopy allows the surface of the endometrium to be studied at all stages of the menstrual process¹. The cyclical changes are piecemeal and each phase is completed rapidly with different stages of the cycle co-existing in adjacent areas of the same endometrium.

Histological and SEM examinations demonstrate that after shedding of the superficial endometrium, the exposed basalis is rapidly covered with a fibrinous mesh, upon which new surface epithelial cells develop. These appear to arise from underlying stromal cells rather than as epithelial outgrowths from the residual gland stumps as had previously been thought². In fact we have demonstrated that the large diameter residual secretory phase gland stumps lined by tall columnar epithelium within the basalis are shed and replaced with extra-ordinary rapidity by new narrow glands lined by small cuboidal cells³. These new surface and new glandular cells arise without any evidence of associated local cell division. Glandular epithelial cells during menstrual phase of the cycle do not express the proliferation marker Ki-67 and are therefore not actively undergoing mitotic cell divisions at the very time surface regeneration is at its maximum. The new epithelial cells therefore appear to arise by differentiation from surrounding stromal cells rather than mitotic division of the residual glandular cells as had previously been supposed⁴⁻⁷.

On the basis of these observations we postulate that endometrial epithelial cell repair after menstruation occurs as a consequence of differentiation of endometrial stem/progenitor cells. A similar suggestion was made by the great pathologist Papanicolaou in 1933⁸. CD34 antigen is a primary marker of Haematopoietic Stem Cells and we have shown that cells expressing this antigen are present within the stroma in a layer within the upper border of the basalis. This positions these potential stem cells after menstrual shedding at the site of the newly exposed basalis which is the area of maximum cellular repair at this time. Similarly we demonstrate for the first time that CD34+ cells are closely adherent to the outer surface of the glands within the basalis. Such anatomical proximity with the site of new glandular formation also approximates these potential stem cells immediately adjacent to the site of new gland formation.

We wondered if there was a similar cyclical loss and regeneration of glandular epithelium within endometriotic and adenomyotic implants. Our observations strongly suggest that on day 28-days 1-2 of the cycle, cells making up the glands of both these pathological types of implants are shed into the cavities of the old glands and are subsequently replaced by new cells again without evidence of mitotic cell division. As in eutopic endometrium, we show for the first time that within endometriotic and adenomyotic lesions, the glandular structures are frequently surrounded by CD34+ potential stem/progenitor cells at precisely the location required for rapid cellular replacement.

To test this hypothesis further we transplanted human endometrial tissue into an immune-privileged site of a large animal model. Pieces of endometrium were transplanted into the anterior chamber of sheep eyes. There the transplants showed a consistent pattern of first blanching and loosing most recognisable glandular and other structural features typical of endometrium. Subsequently some of the transplants gained vascularisation from the iris and/or cornea. Within 5-7 days some of the transplants had developed new surface, glandular and vascular systems and in some cases clear evidence of CD34+ marker cells surrounding the glands in the transplant were seen. Of particular interest, were 2 cases in whom classic endometriosis developed in the cornea. The cornea is usually a clear structure without a blood supply. Within 7 days of transplanting human endometrium new vessels were seen to extend from the sheep to the implant. The lesions in the cornea did not arise from the body of the implant which was, in each case, placed in the anterior chamber of the eye. The new glands must have arisen from the deposit of a single/few endometrial cells detached during the surgical transit of the specimen through the cornea. There is a hint of human CD34+ cells surrounding the glands even in these corneal implants

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CONCLUSIONS:

- The cyclical growth, shedding and regeneration process seem similar in endometrium, endometriosis, adenomyosis and endometrial transplants.
- Our hypothesis is that this rapid regeneration of new epithelial and vascular tissue is a consequence of stem/progenitor cell differentiation and not simple mitotic cell division of residual epithelial cells

REFERENCES:

- 1 Garry R. Pressure-Controlled Hysteroscopy during Menstruation. JMIGS 2010 In Press
- 2 Garry R, Hart R, KA Karthigasu, Burke C. A re-appraisal of the morphological changes within the endometrium during menstruation: a hysteroscopic, histological and scanning electron microscopic study. Hum Reprod. 2009;24:1393-1401
- 3 Garry R, Hart R, KA Karthigasu, Burke C. BJOG submitted for publication
- 4 Novak E, Te linde RW. 1924 The endometrium of the menstruating uterus. JAMA 83,900-6
- 5 Ferenczy A 1976. Studies on the Cytodynamics of human endometrial regeneration. 1. Scanning electron microscopy. Am J Obstet Gynecol 124 64-73
- 6 Ludwig H, Metzger H Fraull 1990 Endometrium: tissue remodelling and regeneration . In Contraception and Mechanisms of endometrial bleeding pp 441-466 Eds d'Arcangues, IS Fraser, JR Newton, Odlind V Cambridge University Press, Cambridge.
- 7 Salamonsen LA. 2003 Tissue injury and repair in the female human reproductive tract. Reproduction. 125 301-311
- 8 Papanicolaou GN 1933. Epithelial regeneration in the uterine glands and on the surface of the uterus. Am J Obstet Gynecol 25,30-37

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NON-SURGICAL THERAPIES FOR UTERINE FIBROIDS

FRIDAY 28 / SESSION 6 / FIBROIDS / 1100-1120

Yuen PM

Uterine fibroids are the most common female genital tract tumour, occurring in 30-40% of reproductive women. Most fibroids are asymptomatic, but when symptoms occur they are usually significant and often disabling. Treatment is generally indicated when fibroids become symptomatic and surgery, either hysterectomy or myomectomy by whatever operative approach, is still the standard. However, many women are reluctant to undergo surgery because its invasiveness and inherent risk, and many more are worry about losing their uterus even when myomectomy is being contemplated. Over the past decade, a variety of new non-invasive treatment options have become available. Uterine artery embolization (UAE) is probably the most effective non-surgical therapeutic modality with reported failure rate between 5.5 to 9.0% at short term follow-up and 12.7-21.0% at a longer term follow-up. Size and location of the fibroid are important factors in determining the failure rate. Transvaginal uterine artery occlusion is a newly developed alternative method of reducing blood flow in the uterine arteries and is still experimental. MR guided focused ultrasound (MRgFUS) is a new non-invasive method of thermal ablation of fibroids using high intensity ultrasound waves directed through the abdominal wall without any incision or needling. Compared with UAE, MRgFUS has more restrictions to the size, number and location of the fibroids and it is less effective in relieving the symptoms and reducing the fibroid volume.

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LAPAROSCOPIC MYOMECTOMY: HOW BIG IS TOO BIG?

FRIDAY 28 MAY / SESSION 6 / FIBROIDS / 1120-1140

Sizzi O, Rossetti A

INTRODUCTION: Very few laparoscopic gynaecological procedures have been as much criticized and discussed as laparoscopic myomectomy (LM) has. Notwithstanding the fact that, after more than twenty years since K.Semm performed the first laparoscopic myomectomy, the definitive positive results in favour of this technique have been published. Recognized advantages of LM are in fact the ones peculiar to minimal access surgery, including shorter hospitalization and rapid recovery. Well designed randomized prospective studies have also demonstrated that laparoscopic myomectomy may offer the benefits for the patients of lower postoperative pain, lower haemoglobin drop and lower febrile morbidity in comparison with traditional laparotomy. Moreover, clear evidences have shown that, although LM is regarded as a procedure of medium complexity that requires high mastery in endoscopic suturing because it demands complete laparoscopic haemostasis and closure of the operative site to avoid uterine rupture in a potential future pregnancy, no significant differences were found as concerns pregnancy rate and abortion rate in comparison to "open" procedures.

However, as with any surgical procedure, the laparoscopic approach is associated with complications that must be offset against the expected clinical benefits. Anxiety has been expressed that the rate of complications associated with this technique may be greater than those associated with traditional abdominal myomectomy especially in cases of multiple or larger myomas. We have carried out laparoscopic myomectomies for over 15 years and studied short and long-term results in a prospective fashion.

PATIENTS: Inclusion criteria were age \leq 42 years, the presence of at least 1 symptomatic myoma $>$ 4cm and the absence of submucous myomas which could be removed by hysteroscopy. No upper limit to myoma size was posed, as long as the myoma could be mobilized. Usually a number of myomas for patients equal or inferior to eight were the indication to myomectomy but in some case the number of myomas was higher. There are many strategies to allow a big myoma to be approached by laparoscopy: a) use of preoperative GnRH analogs; b) Use of vasoconstrictive agents; c) Higher ports placement; d) Use of a 30° laparoscope; e) use of a very strong tenaculum.

In case of very big myomas paramount attention was given to presurgical workout, especially to rule out sarcomas. RMI images gave us notions about the myomas localization and extension. In simpler cases of very large myomas, GnRH agonist was prescribed for three months. In myomas that could not be approached by laparoscopy a presurgical uterine artery embolization was proposed to the patient and a combined procedure carried out.

TECHNIQUE: Trocar position was chosen regarding myoma size and localization. The use of a supraumbilical port for the optic is recommended. In bigger cases, a fifth ancillary trocar can have a role in mobilizing the myoma. In very large case, the handoscopy is mandatory. To reduce vascularisation and blood loss, starting in 1997 we injected myomas with diluted ornitin vasopressin (12) and now, diluted (20 IU: 500mL) argipressin. The vasoconstrictive agent was injected laparoscopically between the myometrium and the myoma capsule, looking for the cleavage plane, until blanching occurred.

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For subserosal and intramural myomas, a vertical incision (hysterotomy), both for anterior and posterior myomas, was made on the serosa overlying the myoma down and through the myoma pseudocapsule with a unipolar hook and high cutting current.

After exposure of the myoma, a grasping forceps was positioned to apply tractions on the myoma and expose the cleavage plane. Traction on the myoma applied with tenaculum with a counter traction on the uterus facilitated dissection. Mechanical enucleation was advised whenever possible. Division of the connective tissues surrounding the myoma was obtained with unipolar hook or with Ultrasonic Cutting and Coagulating System (SonoSurg™, Olympus, Japan), the latter having the advantage of less tissue charring. The only exception to this technique was in case of unsuspected adenomyosis. In this situation the cleavage plane does not exist and excision can only be carried out with monopolar hook, sharp cutting or ultrasonic energy device, paying attention to use electro surgery close to the myoma and not to the myometrium.

As regards to infraligamentous myomas, they usually are to be considered as pedunculated or subserosal myomas arising into the broad ligament. The peritoneum surrounding the myoma was incised. The myoma was gently enucleated by the surrounding areolar tissue. Haemostasis could be achieved with bipolar coagulation of the vessels reaching the myoma paying attention to dangerous structures such as the ureter or uterine vessels. As the base of the myoma has been reached, coagulation of the blood supply was obtained with bipolar forceps. Eventually the suture was made.

For subserosal or intramural myomas, suturing was usually done along one or two layers depending on depth of incision. It consisted of bringing the entire thickness of the edges of the myomectomy site together to prevent the formation of haematomas.

We used large, curved needles (CT 1, 30 o 40mm) swaged to polyglactin suture (1, or 0 Vycril® (Johnson & Johnson, Somerville, KY, USA). For one layer sutures, we used interrupted, simple or more frequently cross-stitches, tied intracorporeally. It was often necessary to make a suture in several layers. In this case, suturing was usually done along different planes: one large stitch reaching the deep layers and one more superficial suture to introflect the serosa. A running suture was also used: it was applied firstly in the deeper plane starting from the apex of the myomectomy scar to the base, continuing along the more superficial plane from the base to the apex. The suture was in the end tied intracorporeally with the tail of the running suture. Despite the use of an electromechanical morcellator, length of the procedure positively correlates to the number of myomas and diameter of the dominant myoma.

RESULTS: The risk of major complications resulted significantly higher for patients with myomas of dimension equal or greater than 5cm (odds ratio: 6.88, P=.017), for patients who underwent a longer surgical operation (odds ratio: 1.02, P=.003) and for patients with infraligamentous myomas (odds ratio: 6.44, P=.003).

Regarding the linear correlation between the myoma features and the other quantitative variables, the results can be summarized as follows: operative time was significantly positively correlated with the dominant myoma diameter (R = 0,420; P <.01) and the number of myomas removed per patient (R = 0,077 P <.000) but no correlation existed with the myoma location. Estimated post-operative haemoglobin and the length of hospitalization were not significantly correlated with the myoma characteristics. Also the risk of recurrences was correlated with myomas larger than 5cm and with the number of removed myomas.

Conversion rate was 0.43%, higher in case of multiple myomas.

CONCLUSION: The clinical results and extremely low conversion rate suggest that laparoscopic myomectomy is a safe and reliable procedure even in presence of enlarged myomas. The pregnancy rate and outcome indicate that both wish for pregnancy or infertility prior to surgery is not an exclusion criterium for laparoscopic approach. Considering the high recurrence rate also with laparotomy and the consequent risk of repeated surgery, we think that patients should be offered the least invasive surgical approach available even in case of very large myoma.

REFERENCES:

1. Dubuisson JB, Fauconnier A, Chapron C, et al. Reproductive outcome after laparoscopic myomectomy in infertile women. *J Reprod Med.* 2000;45:23-30.
2. Dubuisson JB, Fauconnier A, Fourchette V, et al. Laparoscopic myomectomy: predicting the risk of conversion to an open procedure. *Hum Reprod.* 2001;16:1726-31.
3. Landi S, Zaccoletti R, Ferrari L, et al. Laparoscopic myomectomy: technique, complications, and ultrasound scan evaluations. *J Am Assoc Gynecol Laparosc.* 2001;8:231-40.
4. Malzoni M, Rotond M, Perone C, et al. Fertility after laparoscopic myomectomy of large uterine myomas: operative technique and preliminary results. *Eur J Gynaecol Oncol.* 2003;24:79-82.
5. Miller CE, Johnston M, Rundell M. Laparoscopic myomectomy in the infertile woman. *J Am Assoc Gynecol Laparosc.* 1996;3:525-32
6. Nezhat C. The "cons" of laparoscopic myomectomy in women who may reproduce in the future. *Int J Fertil Menopausal Stud.* 1996;41:280-3
7. Seracchioli R, Rossi S, Govoni F, et al. Fertility and obstetric outcome after laparoscopic myomectomy of large myomata: a randomized comparison with abdominal myomectomy. *Hum Reprod.* 2000;15:2663-8.
8. Sizzi O, Rossetti A, Malzoni M, Minelli L, et al. Italian multicenter study on complications of laparoscopic myomectomy. *J Minim Invasive Gynecol.* 2007 Jul-Aug;14(4):453-62
9. Takeuchi H, Kuwatsuru R. The indications, surgical techniques, and limitations of laparoscopic myomectomy. *JSL.* 2003;7(2):89-95.

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LIMITATIONS OF LAPAROSCOPIC MYOMECTOMY

FRIDAY 28 MAY / SESSION 6 / FIBROIDS / 1200-1220

Shiota M, Umemoto M, Tobiume T, Kotani Y, Hoshiai H

PURPOSE: The purpose of this study was to evaluate indications of laparoscopic myomectomy (LM) and the efficacy of preoperative GnRHa therapy.

METHODS: Study subjects were 273 patients who underwent LM between 1995 and 2010 at our hospital. Based on surgical performance, indications of LM were discussed in terms of the size and number of myomas. The efficacy of preoperative GnRHa therapy was evaluated by comparing the volume of myomas on MRI images and surgical performances. The recurrence rate after LM was evaluated by comparing the number of myomas confirmed on preoperative MRI and that actually enucleated.

Statistical analysis was performed by ANOVA, Student's t-test, X – square test and the Kaplan-Meier method. For all tests, p < 0.05 was considered significant.

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RESULTS: The group with myomas 10cm showed significant increases in blood loss, operative time, and the rate of conversion to laparotomy compared with groups with smaller myomas. Also, the number of myomas was a factor that affected surgical performance. The myoma volume was reduced as a result of 43% by preoperative GnRHa therapy without compromising surgical performance. No significant difference was observed on GnRHa therapy in the 4-year cumulative recurrence rate. The recurrence rate was significantly higher in the group in which there was a possibility that some of myomas were missed and left.

DISCUSSION: The indications of LM were considered for myomas < 10cm and limited by the number of myomas. The postoperative recurrence rate will decrease if surgery is completed on ensuring no myoma has been overlooked by precisely identifying the preoperative myoma status on MRI. Preoperative GnRHa therapy was considered to be a factor not compromising the surgical performance and recurrence rate, but was effective as a pretreatment for LM to expand the indications.

REFERENCE:

1. Y Kotani, M Shiota, M Umemoto et al. Efficacy of preoperative gonadotropin-releasing hormone agonist therapy for laparoscopic myomectomy. *Asian J Endosc Surg* 2009;2:24-28.

KEY WORDS: laparoscopic myomectomy (LM), GnRHa therapy, postoperative recurrence

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THE EVOLUTION OF LAPAROSCOPIC SURGERY IN PELVIC FLOOR PROLAPSE

FRIDAY 28 MAY / SESSION 6

PELVIC FLOOR PROLAPSE II / 1100-1120

O'Shea R

The advent of advanced laparoscopic pelvic floor surgery heralded a new understanding of the pelvic floor both from an anatomical and function point of view. Traditionally, it was perceived that correction of apical prolapse was suboptimal vaginally. The use of the laparoscope initially with Uterosacral Colpopexy and now laparoscopic Mesh Sacral Colpopexy have significantly increased our options.

Laparoscopic Supralelevator repair for level II posterior compartment prolapse initially gave us endoscopic options for the posterior compartment. This procedure however proved very difficult technically and has not achieved widespread popularity.

In the anterior compartment the Burch colposuspension performed laparoscopically appeared to herald a new endoscopic approach for bladder neck incontinence. Laparoscopic surgeons subsequently progressed to paravaginal repair in conjunction with the Burch procedure producing encouraging results. However, the high degree of technical expertise required for this and other laparoscopic pelvic floor procedures has confined its popularity to a relatively small group of laparoscopic surgeons. Although the laparoscopic approach offers additional options in the treatment of difficult prolapse, the standard and most common approach appears to be vaginal.

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LAPAROSCOPIC SACRAL COLPOPEXY – TRICKS OF THE TRADE

FRIDAY 28 MAY / SESSION 6

PELVIC FLOORPROLAPSE II / 1120-1140

Cario G

Laparoscopic Mesh SCP has become the gold standard for apical and global triple compartment prolapse repair especially when the level 1 and 2 support structures have failed completely. This operation which was once only performed for end stage prolapse only is now being performed as a primary procedure more and more often because of the revolution in laparoscopic and robotic surgery. In our own unit we have performed over 250 procedures and it has now become the commonest operation we perform for more than a single compartment defect. This has placed a lot of pressure on our operating times as we commonly perform the operation in association with TLH and Burch colposuspension. We had to dramatically decrease our operating time and we did this by using a number of "tricks of the trade".

1. Anatomy – All landmarks must be identified and marked prior to commencement of surgery. Retroperitoneal dissection must be extensive and the levator muscles cleared with the posterior deep rectovaginal dissection to the level of the perineal body and usually the middle rectal artery identified. The technique for this dissection is discussed. The right uterosacral is identified and transected to sit the mesh flat. Both ureters have to be identified (from above the brim on the right) and marked. The bladder and anterior fornix dissection is often the most difficult and the bladder base needs to be separately identified using probes, a cystoscope or the McCatney Tube plus the "fold" test. Dissection of the sacral promontory and paracolic gutter is crucial and is discussed.
2. Exposure – Various techniques are discussed to get the adnexae out of the way, to lift the bladder forward and to lift the vault to expose the posterior space. When performed with TLH it is often better to do the posterior dissection before the TLH so the apex is easily manipulated and "tented". The sigmoid colon is conveniently "gathered up" and sutured laterally.
3. Choreography – The steps need to flow in technical sequence
4. Using the mesh – The mesh "straps" are best fixed separately with the posterior strap introduced first, then the anterior fornix strap introduced separately. When fixed separately they sit perfectly flat in the position you want and are easily joined above the vault in the presacral space to give extra length and avoid mesh erosion at the vault especially after TLH. The technique is shown. The posterior mesh must be anchored widely and the tacker is perfect for this as well as the sacral promontory fixation. The anterior mesh should not be placed too close to the trigone or it will pull the bladder neck open and increase the incidence of occult stress incontinence.
5. Getting the tension right – How much is enough lift? We discuss our technique and how sometimes a little tension is not a problem
6. Is TLH at the time of SCP the big deal it was purported to be? Not attaching the vault suture line to the mesh makes all the difference.

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LAPAROSCOPIC SACRAL COLPOPEXY – THE EVIDENCE

FRIDAY 28 MAY / SESSION 6
PELVIC FLOOR PROLAPSE II / 1140-1200

Rosamilia A

The abdominal sacral colpopexy is associated with success rates of between 88 and 100% for apical prolapse in series with up to 4 year follow-up. The laparoscopic sacral colpopexy has a comparable success rate of 94% based on series with between 1 and over 5 year follow-up. The level of evidence is largely Grade 3 with few comparative studies. The conversion rates vary between 0.7 and 11%. A randomised trial comparing laparoscopic sacral colpopexy with vaginal mesh kit (Total Prolift) found the former had increased operating time but decreased hospital stay and increased total vaginal length (Brisbane vault trial). There was a greater rate of mesh erosion (9 vs 2%) and contracture (7 vs 0%) in the vaginal group which was responsible for the majority of repeat surgery.

PCOS: MEDICAL TREATMENT

FRIDAY 28 MAY / SESSION 6 / INFERTILITY
1100-1115

Bowman M

Repeated studies have revealed that the best non surgical management of PCOS is a combination of prudent weight loss, diet and exercise. All subsequent medical therapies (if required) have a higher success rate when the PCOS patient is in a normal body mass index (BMI) range. Even a modest reduction in weight, towards a normal BMI will generally lead to a more efficacious return from medical therapy.

With regard to oral assistance of ovulation (clomiphene and/or metformin), a number of studies have compared the relative efficacy of both agents as either a primary single management or in synergistic fashion. Most of these studies have suffered from poor diagnostic (inclusion) criteria and different end points. However the study by Legro et al demonstrated that clomiphene is superior to metformin as a first line therapy for women with PCOS and ovulation disorder.

When gonadotrophins are used for the purposes of ovulation induction, care is required to minimize multiple pregnancy risk and strategies to achieve this will be discussed. Given the advent of single embryo transfer and with improved IVF culture conditions, there is an ongoing debate as to whether a higher ongoing pregnancy rate with a lower multiple pregnancy rate might be achieved by women with PCOS moving directly IVF, rather than first undergoing gonadotrophin ovulation induction.

AUTHOR AFFILIATION: Mark Bowman MBBS PhD FRANZCOG CREI
Medical Director, Sydney IVF

PLACE OF TUBAL SURGERY IN INFERTILITY

FRIDAY 28 MAY / SESSION 6 / INFERTILITY
1115-1130

Leroy Y

Before IVF-ET, tubal surgery, mainly anastomosis, has been the best procedure for the treatment of tubal occlusion for many decades. And has had very good results with Victor Gomel with microsurgery techniques in the 70's and 80's, and in the 90's with Charles Koh by laparoscopy.

Being a surgical procedure of high complexity it has been replaced by IVF-ET in the last two decades. Nevertheless it is still a viable option for treating infertility in some selected cases:

1. Young women under 35 years, who desire to have more than one child;
2. patients in whom IVF-ET had failed;
3. women who are candidates for reversal of tubal occlusion.

The conditions needed to perform such procedure are the following: tubal length more than 4cm. Adequate surgical setting and sound surgical skills and experience.

Video case presentation.

LAST UPDATE IN FERTILOSOPY: A 10 YEARS REAPPRAISAL

FRIDAY 28 MAY / SESSSION 6 / INFERTILITY
1130-1145

Watrelot A

Since our first description of fertiiloscopy, a little more of 10 years are spent. It is probably a good opportunity to review this technique and its place in the infertile work-up.

Many papers have shown the reproducibility of fertiiloscopy as well as the safety of the procedure.

The FLY study (comparing fertiiloscopy and laparoscopy) published in 2003 has demonstrated the accuray of fertiiloscopy.

Moreover the technique allows the routine practise of salpingoscopy and microsalingoscopy which is not the case with laparoscopy.

Today, the place of fertiiloscopy may be considered as central allowing to determine the best therapeutic option according to the findings : Intra utérine insémination when everything is normal including, tubal mucosa, surgery when either endometriosis or peri tubal adhésions are found but with normal tubal mucosa and in vitro fertilization (IVF) in case of abnormal mucosa.

Therefore fertiiloscopy appears to be a complimentary tool to artificial reproductive technologies such as IUI or IVF.

So if practised early in the infertile work-up then pregnancy may be obtained avoiding unnecessary delay which are always stressful for infertile women.

Today thanks to the experience of fertiiloscopie we are moving to transvaginal NOTES.

Program Abstracts SESSION 6 / PLENARY LECTURE

We have therefore described a simplified endoscopic transvaginal approach which allows to perform NOTES technique in a much easier manner than the classical culdotomy technique

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COMPLICATIONS OF IVF

FRIDAY 28 MAY / SESSION 6 / INFERTILITY

1145-1200

Illingworth P

IVF is a relatively minor medical procedure with a very low complication rate. Infection is a rare complication but the most common risk is ovarian hyperstimulation syndrome (OHSS). Recent developments in reproductive medicine (better pre-treatment assessment of ovarian reserve, lower FSH dosages, antagonist down-regulation) have significantly reduced the incidence of this complication. Once OHSS occurs, the 'standard' management of OHSS has little evidence base and significant potential for further iatrogenic harm. An alternative approach will be presented.

Concerns persist about the safety of ovarian stimulation with regard to long-term cancer risk but evidence of harm remains limited.

ROLE OF FERTILITY ENHANCING LAPAROSCOPIC SURGERIES IN ART: INDIAN SCENARIO

FRIDAY 28 MAY / SESSION 6 / INFERTILITY

1200-1220

Patel P, Banker M, Shah S, Munshi S

Acceptance of ART is on all time high in developing countries like India. It is one of the fastest growing fraternities of Medical sciences. To optimize the results in ART, along with good set up and trained dedicated team optimal pelvic condition is essential.

OBJECTIVES: A few conditions where fertility enhancing surgery before ART definitely improves fertility outcome are cavity distorting intramural, sub mucous myomas and Hydrosalpinx. But there is still ongoing debate on areas like non cavity compressing myomas, mullerian anomalies and small endometriomas. We have tried to critically evaluate such areas.

A recent investigation has also suggested that patients with intramural fibroids alone had a significant decrease in pregnancy and implantation rates in comparison to age-matched controls. We have also assessed the impact of intramural leiomyomata without endometrial cavity abnormalities and noted a significant decrease in implantation rates in women with intramural leiomyomata even with hysteroscopically normal endometrial cavities. Similarly in areas of mullerian distortions like complete uterine septum pre ART cavity correction yielded best results in terms of over all ART out come.

With very high incidence pelvic tuberculosis in certain areas of India based on our experience we recommend a hysteroscopic evaluation as close as possible to the IVF cycle in suspected or proved cases, especially in patients who experience multiple IVF / Implantation failures. Adhesiolysis and proximal tubal occlusion or Salpingectomy in cases of Chlamidial or Tuberculous Hydrosalpinx is strongly recommended before resorting to ART.

We also observed a trend towards a more favorable pregnancy rate in the group who under went endometrioma surgery than in those where directly IVF/ ICSI ET was carried out.

REFERENCES:

1. Eric S. Surrey, M.D., Annette K. Lietz, L.P.N., and William B. Schoolcraft, M.D., Impact of intramural leiomyomata in patients with a normal endometrial cavity on in vitro fertilization – embryo transfer cycle outcome. FERTILITY AND STERILITY VOL. 75, NO. 2, FEBRUARY 2001
2. P.C.Klatsky, D.E.Lane, I.P.Ryan and V.Y.Fujimoto, The effect of fibroids without cavity involvement on ART outcomes independent of ovarian age : Advance Access publication September 22, 2006.
3. Annika Strandell, Anette Lindhard, Hydro Salpinx and ART HUMAN REPRODUCTION vol. 15 no. 10, pp 2072-2074, 2000
4. Effect of hysteroscopy performed in the cycle preceding controlled ovarian hyperstimulation on the outcome of in vitro fertilization FERTILITY AND STERILITY VOL. 79, NO. 3, MARCH 2003
5. Paolo Vercellini, Edgardo Somigliana, Paola Vigano, Annalisa Abbiati, Giusy Barbara, and Pier Giorgio Crosignani Surgery for endometriosis-associated infertility: a pragmatic approach. Human Reproduction, Vol.24, No.2 pp. 254 – 269, 2009

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PLENARY LECTURE

THE PLACE OF MYOMECTOMY IN THE INFERTILE PATIENT

FRIDAY 28 MAY / PLENARY LECTURE

1230-1300

Miller C

It is well documented that submucosal fibroids negatively influence pregnancy outcome, and that hysteroscopic myomectomy improves both pregnancy and delivery rates. The impact of intramural fibroids and subsequent myomectomy is much more controversial.

Evidence based literature will be presented on the involvement of uterine fibroids in infertility as well as the positive effect of myomectomy.

At the conclusion of this discussion, the attendee will be able to describe the various types of uterine fibroids based on location, the impact of uterine fibroids on infertility based on location, and the effect of myomectomy on subsequent pregnancy outcome.

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Program Abstracts SATELLITE MEETING

SLS OFFERS A POWERFUL TRAINING TOOL FOR SURGEONS – WORLDWIDE

FRIDAY 28 MAY / MEETING OF THE SOCIETY OF LAPAROENDOSCOPIC SURGEONS / 1400-1430

Wetter P

"This is quite honestly the most impressive information available for surgeons today."

– Richard Satava, MD

"Our goal was to create the best educational resource for MIS surgeons worldwide."

– Paul Alan Wetter, MD

"The mission of the Society of Laparoendoscopic Surgeons (SLS) is to provide information and education to surgeons worldwide."

Paul Wetter, MD, Chairman of SLS,
(at the Eighteenth SLS Annual Meeting & Endo Expo 2009)
Boston, Massachusetts, USA, September 9-12).

In line with this mission, SLS has just launched SLS TV, said Wetter. Now, no matter where you are in the world, if you have Internet access or an iPhone, you can view educational videos of the latest minimally invasive surgical techniques. For example, one video shows a case of transvaginal extraction of donor nephrectomy. Another shows a case of laparo-endoscopic single site (LESS) cholecysto-hysterectomy. Videos are also available for bariatric, cancer, colon, hernia, hysterectomy, laparoscopic cholecystectomy, multispecialty, nephrectomy, and robotic surgical techniques. This initial group of videos on SLS TV comprises award winning videos presented at the Endo Expo in Chicago 2008 and Boston 2009, and they are now available free of charge for all to view. Yes, SLS TV is open access, as is the entire SLS Web site. To view SLS TV, log onto <http://laparoscopy.blogs.com/slstv/>. The categories of videos are listed on the left side of the page. Just click on the topic of interest, and the videos will appear. Choose the one you want, click, and enjoy. It's that simple.

In the future, SLS TV will offer journal link videos, textbook link videos, unusual cases, teaching videos, equipment training videos, a video journal for minimally invasive surgery, videos by category, videos by speciality, and regular and HD videos. For example, the 3rd edition of the SLS textbook *Prevention and Management of Laparoendoscopic Surgical Complications* is currently being developed. The online version will have videos imbedded in the text, which you will be able to access with just a click. You will also be able to watch these videos on your iPhone. This is especially helpful, for example, when making rounds. You can show fellows or interns a video of various procedures or access information on the spot to answer questions a surgical student might have. Medical journal Web sites are 5% open access and 95% closed access. No so with SLS. This is really noteworthy: the SLS Web site has been 95% open access in the past and is now 100% open access. So SLS is leading the way in providing quick, free access to the latest minimally invasive surgical information to surgeons all around the globe. In fact, *JLS* is so accessible that it has ranked in the TOP 100 of 10,000 scientific publications on IngentaConnect for full-text downloads in April, June, August, November, December 2007; March, June, August 2008; and February, March 2009.

To reach out to more surgeons around the world and provide them access to minimally invasive educational material, the 1st edition of *Prevention and Management* is now available online in Spanish, Chinese, and Portuguese, in addition to English.

"It is important to keep up with not only national but international advances," said Wetter. In addition to SLS TV, the SLS Web site will help busy surgeons keep up with all of the latest medical information. It will be right at their fingertips. No password is required.

Also available on the Web site is RSS (really simple syndication) feed, which allows access to hundreds of newspapers and journals. You can even have RSS feed of the latest SLS information sent directly to your computer or iPhone. You can also conduct searches, powered by Google, on the SLS Web site through the Scholarly Laparoscopy Search page, which allows you to search the SLS open access 1st edition textbook, SLS meetings, Laparoscopy Today, SLSmE and Online Support Materials, multispecialty peer reviewed JLS articles, and you can even enter your own topic to search.

Social networking is all the rage today among young surgeons and surgeons who are young at heart. The SLS Web site allows you to share information with colleagues through various social networking sites, such as Twitter, Facebook, My Space, and over 100 others just by clicking on the Share link available in the left hand column on most SLS Web site pages.

As mentioned above, the 3rd edition of the SLS textbook is now being written and will be available in both printed and online versions. Currently, two other books are available on the Web site: *Nezhat's History of Endoscopy* and the 1st edition of the SLS textbook published in 1999. Both, of course, are open access.

Also available on the Web site is information about the Asian American and Euro American MultiSpecialty Summits. Web site pages for these conferences are up all year round. These Summits alternate each year, with the Euro American Summit having representatives from Europe and the Americas meeting every two years in Orlando, Florida, and the Asian American Summit being held in Hawaii in alternate years for Pacific Rim countries. You can register online to attend these conferences.

A Virtual Exhibit Hall is also available on the Web site. This is a directory to exhibitors and resources for surgeons. If you are looking for a particular type of instrument, this is the place to find it. Contact information is available so you can connect with the manufacturer of whatever minimally invasive instruments interest you.

It is even possible to find a physician who is a member of SLS no matter where he or she lives, either in the United States or outside of the United States, by visiting the Find a Doctor page that has links to the SLS member directory.

Best of all, you are free to copy, distribute, and transmit any information on the SLS Web site as long as you indicate where you obtained the information, you do not use the material for commercial purposes, and you do not alter, change, or add your own information to the work. Yes, SLS ascribes to Creative Commons. Just click on the Creative Commons icon to find out more.

With no password required, 100% open access, powerful search capabilities, SLS TV, and much more, the SLS Web site is the right place to increase your knowledge and training in minimally invasive surgery.

Program Abstracts SATELLITE MEETING

GENERAL SURGERY PEARLS FOR GYNECOLOGISTS

FRIDAY 28 MAY / MEETING OF THE SOCIETY OF LAPAROENDOSCOPIC SURGEONS
1430-1500

Morrison J

There are several general surgical conditions that are encountered by Gynecologists on a routine basis in the course of surgery. The conditions range from benign appearing and acting conditions such as hernias, ventral and inguinal to more urgent conditions such as diverticular abscesses or appendiceal abscesses or tumors of the bowel. These conditions will be discussed regarding their diagnosis and treatment.

The recommended proper handling of bowel with laparoscopic graspers and the differences between the two primary stapling devices with their proper utilization will be discussed as well. At the end of the talk, the audience should have a clearer understanding of common surgical conditions encountered in gynecologic surgery and what can and should be done for them. A clearer understanding of common general surgery conditions that cause pelvic pain and their treatment will be discussed as well.

THE VALUE OF CYSTOSCOPY FOR THE GYNAECOLOGICAL SURGEON

FRIDAY 28 MAY / MEETING OF THE SOCIETY OF LAPAROENDOSCOPIC SURGEONS
1500-1530

Erian M, Mc Laren G

The urinary and genital systems are close anatomical relations in the female pelvis. Therefore, the gynaecological surgeon should be competent at cystoscopy and ureteric stenting procedures for diagnostic and therapeutic purposes. For best results a multi-disciplinary approach involving a gynaecological and urological team is ideal.

Intra-operative cystoscopy is advantageous in cases of laparoscopic hysterectomy, abdominal hysterectomy with extensive pelvic adhesions, vaginal hysterectomy and pelvic floor repair, coplosuspension, TVT and bladder neck sling procedures to manage genuine stress incontinence of urine, paravaginal and anterior vaginal repairs, Mc Call culdoplasty, Moschowitz procedure, vault suspension to uterosacral ligaments, laparoscopic repair of enterocele, sacral coploxy, laparoscopic/laparotomic excision of extensive pelvic endometriosis, surgical staging of pelvic malignancy, and following caesarean hysterectomy for life-threatening postpartum haemorrhage.

Cystoscopy may reveal an unexpected injury of urinary bladder e.g. vesico-vaginal fistula, iatrogenic ureteric injury as in kinking, accidentally blocking the course of the ureter by a suture material, or less commonly completely severing the structure.

Distension medium for cystoscopy is either sterile water or normal saline with or without a photochromatic dye e.g. Indigo Carmine 1-2 mg/kg body weight given slowly intravenously over 5-10 minutes. Methylene blue is less frequently used.

Side effects of photochromatic dyes include transient hemodynamic changes viz. hypertension, increased CVP (Central Venous Pressure), increased total peripheral resistance, decreased cardiac output, decreased stroke volume and bradycardia. Rarely, severe hypertension /hypotension, anaphylaxis and vasoconstriction may result. Indigo Carmine electively inhibits nitric oxide mediated vascular endothelium dependent relaxation and vascular smooth muscle guanyl cyclase. Methelene blue, however, inhibits soluble guanyl cyclase, acetylcholine and sodium nitroprusside-induced vasorelaxation. Methelene blue may be metabolised into leukomethylene blue which is colourless in urine. Complications of cystoscopy include dye sensitivity, urethral trauma with false passage formation and endothelial trauma, bladder contusion, bladder perforation, haemorrhage and infection. Literature overwhelmingly supports adjunctive intra-operative cystoscopy as 4.8 – 5.1% of patients undergoing major gynaecological surgery suffer LUT (lower urinary tract) injury^{1,2}. Cystoscopy is accurate in 97.4% of cases in detecting bladder and ureteric patency³ and universal intra-operative cystoscopy is cost-effective⁴. ACOG supports training, experience, gaining competence and credentialing at cystourethroscopy for trainees in general Obstetrics and Gynaecology⁵.

REFERENCES:

1. Vakili B, Chesson RR, Shobeiri SA, et al. The incidence of urinary tract injury during hysterectomy: a prospective analysis based on universal cystoscopy. *Am J Obstet Gynecol* (2005);192(5):1599-604
2. Gustilo-Asby AM, Jelovsek JE, Barber MD, et al. The incidence of ureteral obstruction and the value of intraoperative cystoscopy during vaginal surgery for pelvic organ prolapsed. *Am J Obstet Gynecol* (2006);194(5): 1478-85
3. Ibeanu OA, Chesson RR, Echols KT, et al. Urinary tract injury during hysterectomy based on universal cystoscopy. *Obstet Gynecol* (2009);113(1):6-10
4. Visco AG, Taber KH, Weidner AC, et al. Cost-effectiveness of universal cystoscopy to identify ureteral injury at hysterectomy. *Obstet Gynecol* (2001);97 (5 Pt 1):685-92
5. ACOG Committee Opinion. Number 372. July 2007. The role of cystourethroscopy in the generalist obstetrician-gynecologist practice. *Obstet Gynecol* (2007); 110 (1):221-4

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Program Abstracts SESSION 8

IS LAPAROSCOPY NECESSARY PRE-IVF

FRIDAY 28 MAY / SESSION 8 / 1600-1610

Valero A et al.

INTRODUCTION: In spite of progress in reproductive technics, genetics, IVF/ET/ICSI, take-home babies rates of more than 30%, hormonal treatment, adequate psychosomatic evaluation, the patient still needs surgical corrections of the genital tract: like, opening of peripherally or proximally occluded Fallopian tubes, stenosis of the genital tract for gamete passage and fertilisation, resection of tumors located on uterus and ovaries and prevention of recurrent abortions.

OBJECTIVES: To evaluate the management of the top tens characteristics previous to the IVF program.

- 1 Symptoms (dyspareunia, hiperpolimenhorrea, bowel and urine troubles)
- 2 Physical exam – palpable mass
- 3 Laboratory – neoplasia markers
- 4 Sonography Imagen (hydrosonography)
- 5 MRI definition
- 6 X ray – Salpingogram, urography, bowel evaluation
- 7 Endoscopic access (hidrolaparoscopy, histeroscopy, laparoscopy, tubalscopy)
- 8 Capsule excision and reconstruction
- 9 Support and follow-up
- 10 Assited reproductive technics (select the ideal)

The main symptoms include Dyspareunia, Dysmenohrrea, Polymenohrrea, Infertility, Bowel malfunction, Urine troubles.

The Influence on infertility is multiple: direct mechanical obstruction, tubal stenosis or blockage, cyst formation of the ovaries, blockage in the pouch of Douglas with bleeding, activation of macrophages, activation of cytokines, immune resistance.

METHODS: To select what kind of lesions we found, we check always the following:

- The bening pelvic masses located in the pelvis are more frecuenly cysts, semisolid, solid and haemorrhagic lesions
- It could be congenital in origen, neofomation, from ectopic tissues, benign and malignant masses.
- It's volumen varies depends of their hystological root and as well as the evolution time.

DIAGNOSIS: Manual delimitation by palpation, hyperpolimenohrrea associated with normocitic and normocromic anemia, eritropoyetin levels eleveated in blood, abdominal plain film reveals the mass, HSG and hysterosonoghrapy reveals deformation of the cavity, urography demonstrate splits ureters by the mass and barium enema reveals external compression.

RULED OUT: Any close organs disfunction:ovary, rectum, endometrial disfunction, pelvic abcess, endometriomas, malignant disease, mesonephric remanents, blader disease, pregnancy, controled ovary hyperestimulation syndrome, pelvic congestion (Taylor Syndrome).

RESULTS: Expectant management depends on: age, tumor size, symptoms, pregnancy status, conservative management: medical management, ablation.

Aim management: Endoscopic and reconstructive approach.

CONCLUSIONS: Medical evaluation, general laboratory profile, endocrine test, U.S., CAT scan, MRI and Surgical management, are the main access to the patients who wants to keep going in there medical advices – is Laparoscopy necessary Pre-IVF.

Yes! To improved the fertility rates we have to perform infertility surgery.

DISCUSSION: Alternative techniques to laparoscopy, hysteroscopy and chromopertubation are:

- Transvaginal hidrolaparoscopy
- Post-operative hydroperitubation
- Second-look laparoscopy with adhesiolysis
- Robot assisted microsurgical tubal surgery
- Laparoscopic uterus-suspension, hysteropexy

(Falcone et al., Fertil Steril 2000; 73(5): 1040-1042)

AUTHOR AFFILIATION: Alberto Valero et al. Hospital Angeles del Pedregal, México City. Past President of Federacion Mexicana de Endoscopia Ginecologica. International Member of the Board ISGE

IMPACT OF ENDOMETRIOSIS ON IVF OUTCOME

FRIDAY 28 MAY / SESSION 8 / 1610-1620

Tsaltas J

Endometriosis is found in a significant number of patients presenting with infertility. In fact almost 50% of patients who have a diagnostic laparoscopy for infertility (in an ovulatory woman with a male partner who is nomio spermic) will be found to have endometriosis. The endometriosis will vary from minimal to severe. Many of these patients will require IVF and this chapter is designed to look at the impact of endometriosis on IVF outcomes. In this lecture (in the time allocated) I will look at the studies that have tried to shed some light on this difficult problem.

The session that this lecture will be presented is the controversy of the day. This whole session will try and look at the impact of endometriosis on infertility and IVF.

The questions that

1. Does the presence of endometriosis affect IVF
2. How, why, if and when to act
3. Place of medical therapy
4. Should endometriosis be treated before or between IVF cycles
5. How should we best advise patients

I will address these issues based on data available to date.

AUTHOR AFFILIATION: J. Tsaltas; Head of Gynaecological Endoscopy & Endometriosis Surgery, Monash Medical Centre and Southern Healthcare Network; Vice President Australasian Gynaecological Endoscopy and Surgery Society; Board Member International Society for Gynecologic Endoscopy

Program Abstracts SESSIONS 8/9

INFERTILITY AND COLO-RECTAL ENDOMETRIOSIS

FRIDAY 28 MAY / SESSION 8 / 1620-1630

Reid G

Endometriosis is associated with infertility, with estimates that more than 40% of infertile women are affected by the disease. Colo-rectal involvement is thought to occur in 5 to 12% of all endometriosis cases, and may be associated with infertility. While a cause and effect relationship between endometriosis and infertility is yet to be established, proposed mechanisms contributing to infertility include anatomical disturbances, auto-immune factors, altered inflammatory responses and the effect of various cytokines.

There were few available studies considering the impact of bowel surgery for endometriosis on fertility, at the time of our study in 2007. However, two significant publications appeared during 2009, and these will be reviewed.

Our own data will also be presented, reporting the pregnancy rate in a group of infertile women following laparoscopic bowel surgery for severe endometriosis. The pregnancy rate of 60.9% in our series is higher than reported in previous studies of a similar nature.

CONSENT IN ADVANCED LAPAROSCOPIC SURGERY

SATURDAY 29 MAY / SESSION 9 / 0900-0915

Cooper M

This presentation will focus on issues with a surgical focus emphasizing expectation management. Areas of risk assessment will be addressed. Communication issues will be emphasized and comment made on areas such as record keeping, the pressure of time in surgery and coping with complications which may arise during surgery. Care of the post operative patient will also be addressed.

AUTHOR AFFILIATION: A/Prof. M. Cooper; Sydney University, Sydney, NSW, Australia

AVOIDING AND MANAGING BOWEL INJURIES IN LAPAROSCOPIC SURGERY

SATURDAY 29 MAY / SESSION 9 / 0915-0935

Chou D

Bowel injury during gynaecological laparoscopy is fortunately relatively uncommon with the reported incidence of 0.1% to 0.3%. However up to 20% of bowel injury are not recognised intraoperatively, resulting in delay diagnosis, which is associated with high morbidity and a mortality rate of 21%.

Bowel injuries can be mechanical or thermal. Mechanical injuries commonly occur during trocar insertion, with adhesiolysis or while excising diseases affecting bowel, like rectovaginal endometriosis. Traditional laparoscopic entry technique for gynaecologist has been the closed technique involving the use of Veress needle and primary trocar. Surgical colleagues have favoured open techniques, with claims of potentially less injury, though it has not been proven. There has been a variety of trocar design to minimise access related injury, including "optical" ports, but none is full proof in preventing bowel injury. In patients with previous midline laparotomy, instead of inserting the primary port

in the umbilicus, it would be prudent to introduce it in left subcostal area (Palmer's point). One should ideally be familiar with different entry techniques and alternative entry site. Thermal injuries are commonly related to electrosurgical burn and may present late thus one should be aware that the consequence of bowel injury can manifest many days later.

Avoidance of complication is always preferable but unfortunately not always possible. Risk factors for bowel injury during laparoscopic surgery include prior laparotomy, obesity, thin abdominal wall, previous adhesiolysis and operator experience. Preventive measures include appropriate patient selection, preoperative bowel preparation, appropriate choice of entry sites, accurate assessment of adherent organs, avoidance of high risk adhesiolysis when clinically appropriate and involvement of surgical colleague for complex bowel related procedures.

An important aspect in managing laparoscopic bowel injury is being aware that the diagnosis may not be made at the time of surgery thus the need of high level of vigilance for early detection of bowel complication even after surgery. Rate of complications including bowel injury has been shown to decrease with increased level of laparoscopic experience. Acquiring laparoscopic suturing skills allows repairing of minor bowel injuries laparoscopically without resorting to laparotomy. More significant bowel injury warrants involvement of experienced, preferably laparoscopic colorectal colleague.

AVOIDING AND MANAGING URINARY TRACT INJURIES IN LAPAROSCOPIC SURGERY

SATURDAY 29 MAY / SESSION 9 / 0935-0935

Mettler L

Lower urinary tract injuries may occur in any gynaecologic laparoscopic procedure, they are divided into injuries of the bladder, ureter and very seldom occurring renal disturbances. Even the best approach to avoid lower urinary tract injuries by meticulous surgical techniques and intraoperative cystoscopies can not prevent them. Routine intraoperative cystoscopies after all major gynaecological operations only allow for an early recognition to facilitate a repair at the primary surgery, resulting in less morbidity for the patient. The intraoperative demonstration of the ureter and sometimes its dissection is often necessary and required if the surgery includes a dissection in the ureteral area. An open bladder is easily detected by direct emission of urine.

We analyzed retrospectively 1.227 major laparoscopic surgical procedures including supracervical and total hysterectomies, endometriosis surgery, adhesiolysis etc. over a period of three years. Intraoperatively 6 bladder injuries and 3 ureteral injuries occurred. In the postoperative period 1 ureteral injury and 1 vesico vaginal fistula was observed. This sums up to a total of 6 per 1000 for bladder injuries and 3 per 1000 for ureteral injuries. Compared to the international standard where the frequency of bladder injuries varies from 0,2 – 19,5 per 1000 and for ureteral injuries 0 – 16,4 per 1000.

While primary bladder and ureteral injuries can easily be repaired during a laparoscopic procedure the secondary necessary surgery in cases of late recognition of these injuries mostly requires a laparotomic correction. It is of utmost importance to make the ureter your friend and not your enemy during any surgical procedure.

AUTHOR AFFILIATION: L. Mettler; Department of Obstetrics and Gynaecology, University Hospitals Schleswig-Holstein, Campus Kiel, Germany

Program Abstracts SESSION 9

COMPLICATIONS OF SINGLE PORT LAPAROSCOPY

SATURDAY 29 MAY / SESSION 9 / 0955-1015

Andou M

OBJECTIVES: Great breakthroughs in minimally invasive surgery have brought new techniques such as Single Port Surgery (SPS) or Single Incision Laparoscopic Surgery (SILS). These kinds of techniques have appeal for patients as there are few scars give an excellent post-operative cosmetic result. However, this kind of ultra-minimally invasive surgery presents a number of challenges for surgeons such as visual disturbance, maneuverability difficulty as well as issues related to access.

In this presentation I will address visual difficulties such as disorientation, lack of depth perception, the narrow visual information of the operative field as well as other limitations created by the restrictions of the scope.

Working difficulties include various kinds of interference related to maneuverability of instruments; forceps vs forceps, forceps vs scope, trocar vs trocar will also be addressed.

METHODS: After recognizing that the possibility of complications in SPS may be higher, the next natural step is designing strategies for prevention and understanding how to deal with intraoperative injuries which may occur as a result. I will highlight strategies for injury repair using examples from access injuries, surgery for the adnexa, total laparoscopic hysterectomy and malignancy cases. Bladder, ureter (urinary tract) and vascular injury repair will be explained.

In the case of injury we can convert from SPS to multiple ports technique (using 4 puncture points) and can manage the injuries under those circumstances. If we obtain intracorporeal techniques we can manage the injury intraoperatively without conversion to open surgery.

As intracorporeal injury repair relies heavily on suturing, the quality of the repair depends largely on the ability of the surgeon, making intracorporeal suturing perhaps the most important skill for laparoscopic surgeons to master. It is also important to consider the advantages of converting to a four or multiple port laparoscopic approach when complications present risks.

RESULTS: Because of a relatively small number of cases, there are no serious complications to report at present. However, due to the difficult surgical environment we must assume the possibility of complications is higher compared with the standard laparoscopic approach.

DISCUSSION: New challenges and more advanced procedures mean new risks and greater chance of complications. Because intraoperative organ injury is becoming a more common complication in the more complicated ultra-minimally laparoscopic surgery, we have to find ways to keep the laparoscopic surgery environment safe, while keeping it minimally invasive. As the goal of minimally invasive surgery is to reduce the amount of trauma to the patient, repair of operative injuries should also follow this same theme. SPS presents a new phase in the development of ultra-minimally invasive surgical techniques which have the potential to lead to even more developments in this field in the future.

SUGGEST READING: Tae-Joong Kim, MD, Yoo-Young Lee, MD, Min Jae Kim, MD et al. Single port access laparoscopic Adnexal Surgery. J. Minimally Invasive Surg. (2009) 16, 612-615.

PATIENT CARE DURING LONG OPERATIVE LAPAROSCOPY

SATURDAY 29 MAY / SESSION 9 / 1015-1030

Winer WK

The role of the operating room "team" before, during and after operative laparoscopy has expanded greatly over the past several decades. Minimally invasive surgical treatments for women have expanded to include a multitude of procedures. These procedures have become more advanced and sometimes lengthy as well due to the extent of the treatment. These may involve several treatments and procedures during one laparoscopic procedure such as hysterectomy, extensive adhesiolysis, excision of severe endometriosis, site specific pelvic floor repairs, removal of large fibroids and so on. While the extensiveness of these procedures have expanded, so has the role of operating room (O.R.) personnel. As a result of phenomenal visualization, everyone in the operating room can anticipate, participate and follow laparoscopic procedures from the simplest to the most intricate. The role of the team is more important than ever. Most would agree, the more efficient the team, the better the surgeon which in turn may be directly correlated to the efficacy of the surgical treatment of the patient and ultimately the potential for improved patient outcomes. There is an important continuum with all types of surgery and operative laparoscopy is no exception. The efficiency of the "team" is dependent on the continuum of care of the patient beginning with the preoperative period, through surgery and culminating during the postoperative period.

The "team" encompasses everyone involved with the care of the patient before, during and after surgery. Specifically in all 3 of these areas the team refers to: perioperative nurses (to include preoperative nurses, the circulating nurse or nurses, laser nurse when a laser is used and recovery room or PACU nurses), anesthesiologist and/or anesthesiologist, surgeon, surgical assistant, surgical tech, and the person who cleans the instruments and anyone else involved in the surgery and care of the patient. The key ingredient for the team to be successful is that all of these people who are involved in some manner with the care of the patient (either directly or indirectly) work together through effective communication to provide the patient with the best possible surgical experience. In addition to improving efficiency during these long procedures, safety becomes more important than ever. This usually involves a multitude of instrumentation, equipment and energy sources that everyone must be familiar with. Ongoing continuing education and updates is essential as well as constant communication among all members of the team so that patients may benefit from new technology and advances as they become available. These criteria will be reviewed in greater detail during this presentation.

AUTHOR AFFILIATION: W. K. Winer, R.N., B.S.N., CNOR., Director of Research and Technology Development, Endoscopic Surgery Specialist, Center for Endometriosis Care, Atlanta, Georgia, USA

Program Abstracts SESSION 10

ENDOMETRIOSIS AND CHRONIC PAIN: NEW CONCEPTS, NEW EVIDENCE AND NEW MANAGEMENT

SATURDAY 28 MAY / SESSION 10 / 1100-1115

Evans S

Chronic Pain is now considered a disease entity in itself, rather than a symptom of another condition. It represents a change in the way pain impulses are generated and processed in the central nervous system.

Recent scientific and clinical research has shown the intimate relationship between endometriosis and aberrant innervation in the functional layer of the endometrium, endometriotic implants and endometriomas.

This presentation discusses the natural history of endometriosis and chronic pelvic pain, the concept of neuroplasticity and clinical opportunities for early intervention that may be effective at prevention of chronic pain.

Best practice management of Chronic Pelvic Pain requires all of the following:

- Accurate diagnosis of each pain symptom
- Management of each peripheral pain
- Management of the neuropathic chronic pain condition

REFERENCES:

1. Gillett W, Jones D. Chronic pelvic pain in women: role of the nervous system. *Expert Rev. Obstet Gynecol.* 2009 4(2) 149-163
2. Berkley KJ. A Life of pelvic pain. *Physiol Behav.* 2005 oct 15;86(3):272-80
3. Evans S, Tracey D. Pain and Endometriosis. *Pain.* 2007 Nov;132 Suppl 1:S22-5
4. Saarto T et al. Antidepressants for neuropathic pain. *Cochrane Database Syst Rev.* 2005 Jul 20; (3) CD005454

DOES MESH CAUSE PAIN?

SATURDAY 29 MAY / SESSION 10 / 1115-1130

Seman E

The answer to this question is far from a straightforward "yes/no", as there are many different types of mesh, a multitude of applications, a plethora of surgeons and, potentially, countless unique patients and their partners who may be adversely affected. The use of mesh in urogynaecology may cause pain and/or distress in six domains: the patient (denovo, or an exacerbation of preexisting pain); her partner ("hispareunia"); the surgeon, when there is a complication during or after a mesh procedure; the health system (due to the cost of prostheses); through medicolegal fallout involving the caring staff, hospital and prosthetic manufacturer; and for professional colleges who are producing guidelines for training, accreditation and practice. The area of greatest contention in 2010 is the development of pain after mesh-augmented prolapse repair. 2009 was the turning point for the literature on this subject, and many studies have recently been published which help to answer the important question, "Does mesh cause pain?"

THE EVIL TRIPLET OF CHRONIC PELVIC PAIN SYNDROME: PUDENDAL NEURALGIA

SATURDAY 29 MAY / SESSION 10 / 1130-1145

Chung MK, Chung CW, Medina RJ., Gance J, Shriver JS, Durbin E.

SETTING: Midwest Regional Center for Chronic Pelvic Pain and Female Pelvic Medicine in Lima, Ohio. Regional Center for Pelvic Pain and Female Pelvic Medicine, University of Toledo Medical Center, Toledo Ohio.

OBJECTIVE: To determine the incidence of pudendal neuralgia and painful bladder syndrome in patients with chronic pelvic pain.

METHOD: Prospective cohort study of 96 women (ages 18-83) from 4/1/08 – 3/1/09 that presented with chronic pelvic pain with or without irritable voiding symptoms. All patients exhibited bladder tenderness and negative urinary and genital cultures. Patients completed PUF, AUA, and ICSI questionnaires and underwent potassium sensitivity testing. Clinical evaluations established pudendal neuralgia by testing for perineodynia through a sensory pinprick test of cutaneous pudendal nerve branches and a pressure sensation test of the pudendal nerve for the "Valleix phenomena." Patients with potassium sensitivity, indicative of painful bladder syndrome, underwent intravesical therapy. Pudendal perineuronal injections were given as indicated.

RESULTS: The Potassium Sensitivity Test was positive in 73 (76%) patients. 85 (88.5%) patients had pudendal neuralgia, of which 67 (78.8%) had positive potassium sensitivity tests. 33 patients with painful bladder syndrome finished intravesical therapy. Their mean PUF, AUA, and ICSI scores dropped 44%, 54%, and 51% respectively. 13 patients with less than 20% improvement after intravesical therapy were given pudendal perineuronal injections. Their mean PUF, AUA, and ICSI scores dropped an additional 43%, 47%, and 51% respectively.

CONCLUSION: Previous publications have shown that interstitial cystitis/painful bladder syndrome and endometriosis are the "Evil Twins" of the chronic pelvic pain syndrome. The significant incidence of pudendal neuralgia (88.5%) in this study suggests that this disease entity and the "Evil Twins" should be at the top of the differential diagnosis for chronic pelvic pain syndrome as the "Evil Triplets."

AUTHOR AFFILIATION: Maurice K. Chung, Cherie W. Chung, Rhonda J. Medina M.D., Jennifer Gance D.O., Jackie S. Shriver C.N.P., Erin Durbin CNP

Program Abstracts SESSION 10

MEDICAL TREATMENT OF CHRONIC PELVIC PAIN

SATURDAY 29 MAY / SESSION 10 / 1145-1200

Molloy AR

Chronic pelvic pain (CPP) is a major cause of distress and disability. In the US CPP is estimated affect 1:7 women, account for 1:10 gynaecological consults and is an indication for between 15-40% of laparoscopies and 12% of hysterectomies. Once treatable medical and surgical conditions have been addressed or excluded, patients with persistent pain should be referred to a multidisciplinary pain centre as soon as possible where a biopsychosocial

assessment will take place. This will aim to identify a range of treatment options aiming to reduce the patients ongoing pain and target other domains such as mood, function and quality of life. Treatments providing pain reduction include medical options such as gabapentin and pregabalin to target neuropathic pain and invasive procedures such as spinal cord stimulation. Increasingly cognitive behavioural therapy is used either individually or as part of an intensive program to help patients cope in an active way with ongoing pain.

AUTHOR AFFILIATION: A. R. Molloy; Senior Staff Specialist and Senior Lecturer University of Sydney Pain Management & Research Centre Dept. of Anaesthesia & Pain Management Royal North Shore Hospital, St Leonards, NSW, Australia



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Free Communications Abstracts SESSION A

WHAT IS THE PREDICTIVE VALUE OF HISTORY TAKING FOR BOWEL ENDOMETRIOSIS?

THURSDAY 27 MAY / FREE COMMUNICATIONS A
ENDOMETRIOSIS I / 1400-1409

Khong S-Y, Lam A, Luscombe G

OBJECTIVE: To assess the predictive value of history taking in the diagnosis of bowel endometriosis

DESIGN: A prospective study between October 2004 and September 2008.

SETTING: University-affiliated tertiary referral centre for endometriosis.

PATIENTS: 454 consecutive women who underwent laparoscopic surgery for treatment of pelvic pain and/or infertility-associated endometriosis.

INTERVENTION: All patients completed a thorough history including a systematic check of bowel and non bowel symptoms. Logistic regression analyses were performed to investigate the predictive value of these symptoms in regards to bowel endometriosis.

RESULTS: 36.5% had bowel endometriosis. Women with bowel endometriosis were more likely to have dyschezia (p value<0.001), constipation (p=0.001), diarrhoea (p=0.01), cyclical diarrhoea (p=0.009) and rectal bleeding (p value =0.028) compared to patients without bowel endometriosis. With regard to non bowel symptoms, dysmenorrhoea (p=0.02) and dyspareunia (p<0.001) were found to be significant predictors for bowel endometriosis.

Using regression analyses, the odds ratio of dyschezia was 3.16 (95% CI: 2.07-4.82), rectal bleeding 2.76 (95% CI: 1.10 - 6.89), dyspareunia 2.35 (95% CI: 1.57 - 3.53), cyclical bowel frequency 1.89 (95% CI: 1.17 - 3.05), constipation 1.82 (95% CI: 1.16 - 2.85), diarrhoea 1.82 (95% CI: 1.16 - 2.85), and dysmenorrhoea 1.81 (95% CI: 1.08 - 3.01).

CONCLUSION: A detailed systematic history of bowel and non bowel symptoms is an integral part in the evaluation of patients with endometriosis. Dyschezia is the most significant predictor followed by rectal bleeding. Findings from this study may contribute towards a surgical triage for patients with endometriosis.

AUTHOR AFFILIATION: S.-Y. Khong, A. Lam, G. Luscombe; Centre for Advanced Reproductive Endosurgery, St Leonards, NSW, Australia

SEGMENTAL BOWEL RESECTION WITH TOTAL LAPAROSCOPIC HYSTERECTOMY IN CASE OF SEVERE ENDOMETRIOSIS

THURSDAY 27 MAY / FREE COMMUNICATIONS A
ENDOMETRIOSIS I / 1409-1418

L. Wang, J. Tsaltas, R. Woods

INTRODUCTION: Grade IV endometriosis (as defined by revised American Fertility Society Classification) is a disease that causes great disruption to the patient in terms of chronic pelvic pain, infertility as well as the possibility of involvement of bowel, bladder or ureter, thereby making surgical treatments difficult and hazardous.

In surgery involving severe endometriosis, firstly the entire abdomen and pelvis have to be assessed and plan made to approaching the disease. Vital structures need to be defined including ureters, vessels and bowel. Then the disease is to be removed, including consideration of hysterectomy, oophrectomy, bowel or urological surgery.

We show a video presentation of a 43 year old women with stage 4 endometriosis involving both sigmoid colon and ureter on the left side. We demonstrate firstly identification and dissection of the left ureter from the uterus and colon prior to performing TLH in conjunction with a segmental bowel resection. This surgery is performed in conjunction with an advanced laparoscopic colorectal surgeon.

AUTHOR AFFILIATION: L. Wang¹, J. Tsaltas¹, R. Woods²;

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PREDICTING COLORECTAL INVOLVEMENT IN SURGERY FOR TREATMENT OF SEVERE ENDOMETRIOSIS

THURSDAY 27 MAY / FREE COMMUNICATIONS A
ENDOMETRIOSIS I / 1418-1427

Khong S-Y, Lam A, Luscombe G

OBJECTIVE: To assess the predictive value of preoperative assessment for colorectal involvement in the management of endometriosis

DESIGN: A prospective study between October 2004 and September 2008.

SETTING: University-affiliated tertiary referral centre for endometriosis.

PATIENTS: 454 consecutive women who underwent laparoscopic surgery for treatment of pelvic pain and/or infertility-associated endometriosis

INTERVENTION: Preoperative assessment included a detailed systematic clinical and vaginal examination. Using these data, women deemed to be at high risk of requiring disc or full segmental bowel resection were referred to the colorectal team preoperatively. Logistic regression analyses were performed to investigate the predictive value of the various domains of preoperative assessment in regards to needing a colorectal surgeon intraoperatively.

RESULTS: 165 out of 454 (36.3%) women were confirmed laparoscopically to have bowel endometriosis. 41 out of 454 (9.0%) women were referred for a colorectal assessment preoperatively. A colorectal surgeon was required at surgery in 32 out of 41 (78.0%) of these cases. The author (AL) was able to proceed with bowel surgery without colorectal involvement in the remaining nine cases. A colorectal surgeon was asked to attend theatre on three occasions out of 454 cases (0.7%) where a preoperative colorectal referral had not been made.

CONCLUSION: Our triage system which combines clinical history and vaginal examination is useful and effective in the management of patients with endometriosis. Patients who are deemed to be at high risk of requiring bowel surgery are referred appropriately to our colorectal colleagues. The need to call for a colorectal surgeon intraoperatively without prior arrangement is minimal.

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Free Communications Abstracts SESSION A

**PREOPERATIVE ASSESSMENT OF ENDOMETRIOSIS:
THE ROLE OF ULTRASOUND**THURSDAY 27 MAY / FREE COMMUNICATIONS A
ENDOMETRIOSIS I / 1427-1436Bignardi T, Lam A

Transvaginal ultrasound (TVS) should be regarded as the imaging modality of choice for assessing location and extension of endometriosis prior to laparoscopy. This is not only because of its availability, low cost and patient acceptability, but particularly because TVS is the most accurate diagnostic modality in the majority of cases of both ovarian and extra-ovarian endometriosis. TVS should be performed by sonographers who are specifically trained in the assessment of women with endometriosis, as part of a multidisciplinary approach in specialized centres. In these centres, the interaction between the sonographer and the surgeon is crucial to optimise the preoperative planning of difficult surgery.

We would like to present a brief review of the ultrasound features of the different locations of endometriosis (ovarian endometriosis, uterosacral ligaments, recto-vaginal and bowel endometriosis, adenomyosis, bladder endometriosis), giving a particular attention to the preoperative assessment of bowel endometriosis. We will discuss the possible alternatives to ultrasound for the detection of bowel endometriosis, as well as the latest imaging techniques available, including three-dimensional ultrasound.

AUTHOR AFFILIATION: T. Bignardi, A. Lam; Centre for Advanced Reproductive Endosurgery, Sydney, NSW, Australia

**LAPAROSCOPIC CYSTECTOMY – HOW TO TACKLE THE
BIG CYST**THURSDAY 27 MAY / FREE COMMUNICATIONS A
ENDOMETRIOSIS I / 1436-1445Siow A, Chua I

INTRODUCTION: Laparoscopic cystectomy is now the standard of care to excise ovarian cyst as it encompasses the benefits of less pain, faster recovery and less post operation adhesions. Most gynaecologists will have no issues removing benign ovarian cyst up to 6cm. A few may attempt laparoscopic cystectomy on larger cyst exceeding 10cm. We present a video on a common case of laparoscopic cystectomy of a 12cm endometrioma. This video demonstrates the standard steps employed for a complete excision of the endometrioma cyst wall. It also highlights the salient tips on tackling a large cyst without losing your bearing.

MATERIALS/METHOD: Video presentation of a case of laparoscopic cystectomy of a large 12cm ovarian endometrioma.

RESULTS: Successful laparoscopic cystectomy.

CONCLUSIONS: Laparoscopic cystectomy is feasible for large ovarian cyst

AUTHOR AFFILIATION: A. Siow, I. Chua; KK Women's & Children's Hospital, Singapore

**COMPLICATION RATES IN LAPAROSCOPIC
MANAGEMENT OF ENDOMETRIOSIS IN A TERTIARY
REFERRAL CENTRE**THURSDAY 27 MAY / FREE COMMUNICATIONS A
ENDOMETRIOSIS I / 1445-1454Kew C, Lam A, Bignardi T, Khong S-Y

INTRODUCTION: To review the rates of complication in the surgical management of endometriosis in a tertiary referral centre.

MATERIALS/METHOD: Prospective data were obtained from consecutive patients seen between December 2004 and October 2009 in a university-affiliated tertiary referral centre for endometriosis.

RESULTS: 466 patients underwent laparoscopic surgery for the treatment of pelvic pain and/or infertility-associated endometriosis. The most common types of surgery were excision of endometriosis (89%) and adnexal surgery (37%). Almost 20% (18%) of surgeries required ureterolysis or cystoscopy. Almost 20% (17%) of patients required bowel surgery, including 5% who needed bowel resection. Rates of intraoperative and postoperative complications are reported. Intraoperative complications included uterine perforation, ureteric injury. Postoperative complications included wound infection, urinary tract infection, ruptured ovarian cyst, DVT, superficial thrombophilitis, and pulmonary embolism, rectal bleeding and leakage, colon perforation and leakage, PV and intra abdominal bleeding, urinary retention, delayed ureteric injury, respiratory distress, chest infection and pleural effusion, painful bowel movements, fever, nausea and diarrhoea.

CONCLUSIONS: A significant proportion of patients with endometriosis managed in a tertiary referral centre will require complex procedures during surgery. Counselling of these patients is important with regards to possible complications associated with surgery.

REFERENCES:

1. Laparoscopic conservative surgery for stage IV symptomatic endometriosis: short-term surgical complications.
2. Minelli L, Ceccaroni M, Ruffo G, Bruni F, Pomini P, Pontrelli G, Rolla M, Scioscia M. *Fertil Steril.* 2009 Dec 5. [Epub ahead of print]

AUTHOR AFFILIATION: C. Kew, A. Lam, T. Bignardi, S.-Y. Khong; Centre for Advanced Reproductive Endosurgery, Sydney, NSW, Australia

**LAPAROSCOPIC EXCISION OF BLADDER AND RECTO-
VAGINAL ENDOMETRIOSIS WITH LOW RECTAL
RESECTION**THURSDAY 27 MAY / FREE COMMUNICATIONS A
ENDOMETRIOSIS I / 1454-1503Bignardi T, Khong S-Y, Evans J, Lam A

Mrs. M.V. 33 y/o first presented to our unit in July 2009 with severe dysmenorrhoea, low back pain, mid-cycle pain, and deep symptoms like dyschezia, dyspareunia and micturition pain. She was diagnosed with severe endometriosis by laparoscopy in June 2006. Laparoscopy revealed severe widespread pelvic endometriosis with nodular disease found in the rectum, vagina, and bladder. The surgeon did not perform any procedure at that time. Subsequently, M.V. had a normal vaginal delivery following a normal pregnancy conceived naturally.

Free Communications Abstracts SESSION A

In July 2009, M.V. was referred to our Centre for persistence of pain symptoms, and defecation urgency. Laparoscopy showed: partial obliteration of pouch of Douglas with ovaries densely adherent and containing endometriomas, large utero-vesical nodule, and large recto-vaginal nodule extending on to anterior rectum. Decision was made to proceed with excision of bowel endometriosis which involved: excision of recto-vaginal and bladder nodules, low rectal resection with primary reanastomosis of bowel, excision of ovarian endometriosis (see video and operation images).

Histology confirmed presence of extensive subserosal and intramural endometriosis involving the rectum, the bladder and the ovaries. Postoperative recovery was uneventful. At 3 months-follow up, the dyschezia, dyspareunia and urinary symptoms had resolved. M.V. has not been started on medical therapy as she is trying to conceive.

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BASIC SURGICAL SKILLS TRAINING: DOES IT WORK?

THURSDAY 27 MAY / FREE COMMUNICATIONS A
ENDOMETRIOSIS I / 1503-1512

Koch J, Clements S, Abbott J

INTRODUCTION: It is important that registrars have a degree of knowledge and skill before performing operative procedures on patients. A surgical skills program has been instituted by the Royal Australian and New Zealand college of Obstetricians and Gynaecologists (RANZCOG) for first year trainees to improve basic surgical skills. The objective of this study was to assess the impact of the RANZCOG Basic Surgical Skills Workshop (BSSW) on the participants' knowledge of electrosurgery, hysteroscopy and laparoscopy and their ability to perform tasks with a laparoscopic pelvic trainer.

MATERIALS/METHODS: First year registrars from the NSW/ACT RANZCOG training program answered a multiple choice questionnaire (MCQ) about laparoscopy, hysteroscopy and electrosurgery before completing a 2 day workshop on these topics. This was then repeated following interactive skill based teaching involving structured exercises, and again 6 months from the workshop. The subjects then performed laparoscopic exercises on a pelvic trainer¹. The time taken to perform a basic and a more complex exercise was recorded at baseline and then again after completing 2 hours of training. These exercises were performed again 6 months later.

RESULTS: 23 first year registrars took part in the BSSW and 13 registrars attended for the 6 month follow up. MCQ results improved immediately after the workshop (baseline 16/34, immediately post course 23/34 $p=0.0001$). The time to complete the simple and complex laparoscopic exercises improved significantly following the workshop (simple exercise: baseline time to complete 30 secs, immediately post course 23 seconds $p=0.008$, complex exercise: baseline time to complete 219 secs, immediately post course 123 seconds $p=0.0001$) The improvement in time taken to complete both simple and complex exercises was maintained at 6 months.

CONCLUSIONS: First year trainee's basic knowledge of electrosurgery, hysteroscopy and laparoscopy and the time to perform skills on a laparoscopic pelvic trainer improved after the BSSW. The time taken to complete simple and complex laparoscopic skills was maintained at 6 months.

AUTHOR AFFILIATION: J. Koch, S. Clements, J. Abbott; Royal Hospital for Women, Randwick, NSW, Australia

CAN WE PREDICT POUCH OF DOUGLAS OBLITERATION USING SONOVAGINOGRAPHY IN WOMEN WITH CHRONIC PELVIC PAIN?

THURSDAY 27 MAY / FREE COMMUNICATIONS A
ENDOMETRIOSIS I / 1512-1521

Reid S, Bignardi T, Alhamdan D, Reid G, Condous G

INTRODUCTION: To date, several ultrasound imaging techniques have been used to predict the likely hood of endometriosis at laparoscopy. These include transvaginal ultrasound, transrectal ultrasound, and more recently, sonovaginography (SVG).¹ Currently, there is a lack of reproducible, accurate pre-operative ultrasound assessment for patients with endometriosis. This study aims to use sonovaginography (SVG) to predict pouch of Douglas obliteration in women with chronic pelvic pain, prior to laparoscopic endometriosis surgery.

MATERIALS/METHOD: This is a continuing, prospective observational study, which began in June 2009. All women included in this study were of reproductive age, had history of chronic pelvic pain, and had a plan for laparoscopic endometriosis surgery. A history was obtained and an ultrasonographic evaluation with SVG was performed on all women prior to laparoscopy. During SVG, a transvaginal (TV) ultrasound was performed with the introduction of gel into the posterior fornix of the vagina. The gel created an acoustic window between the TV probe and the surrounding structures of the vagina, allowing for visualization of the pouch of Douglas (POD). Women then underwent laparoscopic surgery for diagnosis and, if necessary, surgical treatment of endometriosis. The correlation between SVG findings and laparoscopic findings was then analysed to assess the ability of SVG to predict obliteration of the POD prior to surgery.

RESULTS: To date, complete SVG and laparoscopic data was available for 21 women. For predicting POD obliteration, the sensitivity and specificity of SVG were 83% and 100%, respectively. The PPV and NPV were 100% and 94%, respectively.

CONCLUSIONS: Although the numbers are small, this ongoing study demonstrates that SVG can predict POD obliteration. This has potential implications for the selection of women for specialist advanced laparoscopic intervention.

REFERENCES:

1. Dessole S, Farina M, Rubattu G, Cosmi E, Ambrosini G, Nardelli G. Sonovaginography is a new technique for assessing rectovaginal endometriosis. *Fertil Steril* 2003;79:1023-1027.

AUTHOR AFFILIATION: S. Reid¹ T. Bignardi¹, D. Alhamdan¹, G. Reid² G. Condous¹

1. Nepean Hospital Kingswood, NSW, Australia, 2. Sydney Women's Endosurgery Centre, NSW, Australia

Free Communications Abstracts SESSIONS A/B

MIRENA INTRA-UTERINE SYSTEM: DOES IT IMPROVE LONG TERM SYMPTOMS IN WOMEN WITH CHRONIC PELVIC PAIN AND/OR ENDOMETRIOSIS AFTER LAPAROSCOPY?**A MULTICENTRE RANDOMIZED CONTROLLED TRIAL**

THURSDAY 27 MAY / FREE COMMUNICATIONS A
ENDOMETRIOSIS I / 1521-1530

Alhamdan D, Bignardi T, Hardas G, Merkur H, Condous G

INTRODUCTION: Chronic pelvic pain (CPP) is a complex clinical scenario, which affects 15% of women. CPP can be defined based on duration (more than 3 months) and type of pelvic pain. Therefore three types of pelvic pain will be included: cyclical pain during menstruation (dysmenorrhoea), deep dyspareunia and noncyclical pelvic pain. Although the aetiology of CPP is poorly understood, more than 80% of women will have abnormal findings at laparoscopy; most commonly underlying endometriosis. There is promising evidence that the Mirena intra-uterine system (IUS) is useful in women with recurrent pelvic pain post laparoscopic diagnosis or excision of endometriosis. The aim of this randomized control trial is to evaluate the effectiveness of Mirena IUS in all women with CPP with or without evidence of endometriosis at laparoscopy and or histology.

MATERIALS/METHOD: Multi-centre randomised controlled trial comparing Mirena IUS versus expectant management in women with CPP and/or dysmenorrhoea who undergo laparoscopic surgery. All women aged 18 - 45 years with CPP scheduled for laparoscopy will be eligible for inclusion. Women with a non-gynaecological cause of pelvic pain; have no contraindications to the use of Mirena IUS; and no contraindications to laparoscopy and/or general anesthesia. Importantly, all randomised women with endometriosis noted at the time of surgery will have the disease excised laparoscopically. Standard excision of endometriosis at laparoscopy will be performed according to the anatomical location and type; including superficial or deep infiltrating endometriosis. Women will be followed for up to 24 months after laparoscopic surgery.

RESULTS: The primary outcome measure is improvement of pelvic pain and/or of dysmenorrhoea post-laparoscopic surgery for women. Assuming a 30% reduction in pain for the expectantly managed group in order to detect a reduction in pain in the study group of 50% with an alpha of 0.05 and a beta of 0.20, the sample size was estimated at a minimum of 103 women per trial arm.

CONCLUSIONS: This trial will provide evidence to validate the effectiveness or otherwise of progestogen-releasing IUS in treating women with CPP who undergo laparoscopy surgery. The pros and cons of both trial arms will offer guidance to clinicians in making the right treatment choice.

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LAPAROSCOPIC VAGINAL RADICAL TRACHELECTOMY IN EARLY CERVICAL CANCER

THURSDAY 27 MAY / FREE COMMUNICATIONS B
ONCOLOGY / PREGNANCY MASSES / 1400-1409

Shen K, Lang J, Yang J, Xiang Y, Huang H, Wu M

OBJECTIVE: To evaluate the therapeutic efficiencies of preserving fertility treatment in patients with early cervical cancer.

METHODS: 30 patients with early cervical cancer treated by laparoscopic vaginal radical trachelectomy and pre-or-postoperative chemotherapy were analyzed retrospectively, focusing on the treatment indication and management of high risk patients.

RESULTS: The median age was 29 years (range 26-34 years). 25 were nulligravid and 5 multipara, but all patients have a desire to maintain fertility. For FIGO stage, 4 were stage Ia2; 25 were stage Ib1 and 1 was stage Ib2. 29 patients have squamous cell carcinoma and 1 has adenosquamous cell carcinoma. Mean operative time was 3 hours and 12 minutes and mean blood loss was 320ml. There was no intra-or postoperative complications. With mean follow-up time of 13 months, one patient had recurrence (3.3%) and no one had pregnancy. Conclusions: Laparoscopic vaginal radical trachelectomy is a very effective method in the treatment of preservation of fertility in patients with early cervical cancer, but treatment indication should be considered carefully. The management of high risk patients should be investigated deeply.

AUTHOR AFFILIATION: K. Shen, J. Lang, J. Yang, Y. Xiang, H. Huang, M. Wu; Department of Obstetrics and Gynecology, Peking Union Medical College Hospital, Beijing, China

STRATEGIES TO ACCOMPLISH RETROPERITONEOSCOPIC LYMPHADENECTOMY

THURSDAY 27 MAY / FREE COMMUNICATIONS B
ONCOLOGY / PREGNANCY MASSES / 1409-1418

Hoshiba T, Kawamura H, Sasakura C, Maekawa M, Hirabuki S-Y, Sasaki H, Asamoto A

INTRODUCTION: Retroperitoneoscopic lymphadenectomy is less invasive than laparoscopy because it is performed without touching bowels. But the method is difficult due to the narrow operation field and laborious creation of the retroperitoneal space. We examined the factors that made us give up the procedure and the strategies for them.

MATERIALS/METHOD: Of 160 patients who had lymphadenectomy with retroperitoneal approach in our hospital between 2000 and 2009, obstacles to continue the retroperitoneal procedure were surveyed from the operation records.

RESULTS: Three factors were found to hinder continuation of the operation. They were peritoneal injuries, pneumothorax and blood vessel injuries. Six cases (3.8%) with peritoneal injury were converted to laparoscopic lymphadenectomy. Most of the conversion happened in the early stage of the surveyed period. Other peritoneal injuries were successfully repaired with sutures or hemostatic agents to continue the operation. Open surgeries were

Free Communications Abstracts SESSION B

necessary in 2 cases (1.3%) of pneumothorax and injury of the inferior mesenteric artery. After the unpredictable pneumothorax was treated with drainage of the thoracic cavity, the operation was carried out without troubles. Although most blood vessel injuries were managed with coagulation or sutures, retroperitoneoscopic repair of the aorta was unsuccessful.

CONCLUSIONS: Because severe pneumothorax is rare and unpredictable, we cannot help converting to an open surgery. Injury of the peritoneum or blood vessels would be managed as we experience many operations. So almost all retroperitoneal lymphadenectomy can be accomplished when taking these measures against the possible accidents.

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NERVE-SPARING LAPAROSCOPIC RADICAL HYSTERECTOMY IN EARLY-STAGE CERVICAL CANCER

THURSDAY 27 MAY / FREE COMMUNICATIONS B
ONCOLOGY / PREGNANCY MASSES / 1418-1427

Nam J-H, Lim S, Park J-Y

Bladder dysfunction occurs in 30-60 % of patients with early-stage cervical cancer who underwent radical hysterectomy due to injury to autonomic nervous system during surgery. This is a very important health problem of cancer survivor after radical hysterectomy because is close related to the quality of life of patients. Therefore, the concept of nerve-sparing radical hysterectomy has been developed by several surgeons. However, nerve-sparing laparoscopic radical hysterectomy has rarely presented and techniques are varied depending on surgeon. Here we present our technique of nerve-sparing laparoscopic radical hysterectomy in which inferior hypogastric nerve, pelvic splanchnic nerve, and vesical branch of pelvic nerve bundles are preserved.

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THE TRIAGE OF OVARIAN MASSES BY REGIONAL GYNAECOLOGISTS

THURSDAY 27 MAY / FREE COMMUNICATIONS B
ONCOLOGY / PREGNANCY MASSES / 1427-1436

Langdon E, Cottee T, Salfinger S

INTRODUCTION: It has long been described that women with malignant ovarian masses have a better prognosis if their initial surgical management is performed by a gynaecology-oncologist surgeon.¹ As a definitive diagnosis of the malignant nature of an ovarian mass can usually not be confirmed until the mass is removed, a risk assessment tool must be employed. The Risk of Malignancy Index (RMI) is a method regularly used to triage women, with those patients with an RMI over 200 being referred to a gynaecology-oncologist, and those below 200 being treated by a general gynaecologist.² The RMI triage system is not absolute and a further evaluation of women with RMI below 200 must be undertaken by general gynaecologists before initiating management. By reviewing the records of patients referred to the

general gynaecology service at Bunbury Regional Hospital with an operative ovarian mass, an analysis of the local gynaecologists' risk assessment of patient's with an RMI below 200 was possible.

MATERIALS/METHOD: A retrospective review of patients' records referred to the gynaecology service at Bunbury Regional Hospital with an ovarian mass between January 2008 and December 2009 was conducted. Patients were identified through the Genie computer program at South-West Gynaecology and through the Western Australia Tumour Board database. Patients were either operated on by the general gynaecologists in Bunbury or referred to the gynaecology-oncologists at King Edward Memorial Hospital. The initial Ca-125, imaging, menopausal status, personal and family history, operation report and final histology and cytology of all patients were reviewed.

RESULTS: Fifty-eight patients were initially assessed to have an operative ovarian mass by the general gynaecologists, all with an RMI below 200. Forty-nine of these patients underwent surgery under the care of a general gynaecologist and nine patients were referred to the gynaecology-oncology service at King Edward Memorial Hospital due to concerning features particularly on imaging or in their history. All of the 49 patients operated on in Bunbury had benign pathology. Of the 9 patients referred to and operated on by the gynaecology-oncologists, 3 had malignant disease. The sensitivity of the regional gynaecologists detection of likely ovarian malignancy was 33% with a specificity of 100%.

CONCLUSIONS: Despite patients having an RMI below 200, the general gynaecologists at Bunbury Regional Hospital referred nine patients to gynaecology-oncologists because of significant concerns raised during their assessment. This approach proved successful in detecting 100% of cases with malignant disease.

REFERENCES:

1. Kehoe S. et al. The influence of the operating surgeon's specialization on patient survival in ovarian carcinoma. *Br J Cancer* 1994; 70; 1014-1017.
2. Jacobs I et al. A risk of malignancy index incorporating CA 125, ultrasound and menopausal status for the accurate pre-operative diagnosis of ovarian cancer. *Br J Obstet Gynaecol* 1990; 97: 922-929.

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THE EFFECT OF PATIENT BMI ON SURGICAL DIFFICULTY IN LAPAROSCOPIC GYNAECOLOGICAL SURGERYTHURSDAY 27 MAY / FREE COMMUNICATIONS B
ONCOLOGY / PREGNANCY MASSES / 1436-1445

Mcllwaine K, Cameron M, Readman E, Manwaring J, Maher P

INTRODUCTION: Obesity has reached epidemic proportions in the Western World. In Australia obesity has almost tripled over the past 20 years¹ and costs the country \$21 billion annually². According to the 2007-08 National Health Survey, 55% of Australian women are either overweight or obese³.

The obstetric risks of obesity are well documented; however there is little data to guide the pre-operative counselling process in gynaecology patients.

The objective of this pilot study was to assess and quantify whether laparoscopic gynaecological surgery could be completed as planned in overweight and obese patients versus patients of normal weight. The number of attempts at entry, the ease of identification of vital surgical landmarks, conversion to laparotomy and the complication rate were quantified.

MATERIALS/METHOD: A prospective surgical audit was conducted of 64 women undergoing laparoscopy for benign gynaecological conditions at the Mercy Hospital for Women during 2009. The women were grouped according to their BMI with 67.19% being overweight or obese.

RESULTS: A total of 95.31% participants had their surgery completed as planned. The completion rate was highest (100%) in the group of women with a normal BMI however completion rates declined with increasing BMI due to poor surgical access to the pelvis.

The percentage of women requiring more than one attempt at laparoscopic entry was highest in the morbidly obese group when compared with women in all other weight ranges.

Ease of identification of the left and right inferior epigastric arteries and ureters was measured qualitatively. An inability to identify these important landmarks was associated with an increased BMI although statistical analysis showed that the sample size was insufficient to provide any significant conclusions.

The conversion rate to laparotomy was 1.56% in the study population. This occurred in an overweight patient (BMI 29.64) due to poor laparoscopic access.

The overall complication rate was 6.25%. There were 2 major and 2 minor complications. There was a higher mean BMI in patients with a complication (29.8) compared to the group with no complications (28.04) however there was insufficient data to show a significant difference.

CONCLUSIONS: This pilot study suggests an association between increasing BMI and increased entry attempts for laparoscopy; increased difficulty in identifying key surgical landmarks and an overall reduction in completion of gynaecological laparoscopy as planned. A larger study of 300 plus patients will answer the question: Can planned laparoscopic surgery be successfully completed in the overweight and obese patient?

REFERENCES:

1. OECD (2009), Health at a Glance 2009: OECD indicators, OECD Publishing. Doi: 10.1781_glance-2009-en
2. Colagiuri S, Lee C, Colagiuri R et al. The cost of overweight and obesity in

Australia. MJA 2010, 192 (5): 260 – 264

3. Australian Bureau of Statistics 2009 National Health Survey Summary of Results. 43640.0 2007 – 2008 viewed 26 March 2010

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MANAGEMENT OF OVARIAN MASSES DURING PREGNANCY: LAPAROTOMY VERSUS LAPAROSCOPYTHURSDAY 27 MAY / FREE COMMUNICATIONS B
ONCOLOGY / PREGNANCY MASSES / 1445-1454

Kim JY, Nam J-H, Kim Y-T, Kim Y-M, Kim J-H, Kim D-Y, Yoo HJ, Joo W-D, Park J-Y

INTRODUCTION: The aim of this study was to compare laparotomic management and laparoscopic management of ovarian masses during pregnancy in terms of feasibility, safety and efficacy.

MATERIALS/METHOD: A retrospective review was performed on patients with ovarian tumor who underwent surgery during pregnancy between 1989 and 2007 at Asan Medical Center. The outcomes were compared between patients who underwent laparotomic surgery and patients who underwent laparoscopic surgery.

RESULTS: During the study period, 324 patients underwent surgical management for ovarian masses during pregnancy. Of these, 141 patients who underwent adnexal surgery during cesarean section, 39 patients who terminated their pregnancy at the time of surgery, and four patients who had ovarian cancer were excluded. Analysis was performed on the resultant 140 patients. A total of 107 patients underwent laparotomic surgery and 33 patients underwent laparoscopic surgery. Forty four operations were performed during first trimester, 94 operations were performed during second trimester, and 2 operations were performed during third trimester. Sixteen operations were emergency operation due to torsion of ovarian tumor. Twenty one patients were operated on bilateral tumors. Thirty seven patients underwent ovarian cystectomy. There were no differences between laparoscopy group and laparotomy group in terms of age (28.9 ± 3.1 years vs. 28.1 ± 3.6 years, $p=0.2138$), previous surgical history ($p=0.476$), bilateral tumor ($p=0.978$), intraoperative rupture of tumor ($p=0.6528$), proportion of cystectomy ($p=0.085$), operating time (51.1% vs. 54.1% , $p=0.499$), and estimated blood loss (55.9 ± 172.5 vs. 48.2 ± 48.62 , $p=0.678$). The tumor size of laparoscopy group was smaller than laparotomy group (7.6 ± 2.7 cm vs. 9.3 ± 3.9 cm, $p=0.028$), but the difference not much. Laparoscopy group had significantly shorter hospital stay (2.3 ± 0.6 days vs. 5.8 ± 2.4 days, $p=0.001$). There was no immediate pregnancy loss after surgery. There was no postoperative complication requiring further management.

CONCLUSIONS: Laproscopic management of ovarian masses during pregnancy was feasible, safe and effective. Significantly shorter hospital stay was shown after laproscopic surgery in this study. Therefore, it could be considered in pregnant women with ovarian tumor.

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Free Communications Abstracts SESSION B

LAPAROSCOPIC MANAGEMENT OF OVARIAN TORSION IN PREGNANCY

THURSDAY 27 MAY / FREE COMMUNICATIONS B
ONCOLOGY / PREGNANCY MASSES / 1454-1503

Yim LY, Anpalagan A

INTRODUCTION: Ovarian torsion is a gynaecological emergency and occurs in about 3%. It can also occur in pregnancy. Laparoscopic approach has almost completely taken over laparotomy in managing ovarian torsion. However, the mode of entry and port sites have to be different from the usual gynaecological surgery. We are presenting a case of a torsion that was managed by laparoscopy.

CASE REPORT: A 29 year old woman in her 17th week of a twin gestation presented to Westmead Hospital Emergency Department with sudden onset, severe right iliac fossa pain. Ultrasound of the pelvis has revealed a 4.5cm right ovarian cyst with possible torsion from the doppler. After a surgical consult ruled out acute appendicitis, a diagnostic laparoscopy and reversal of torsion was planned.

At laparoscopy, 10mm open entry was performed, superior to the umbilicus. Two 5mm upper quadrant lateral ports were placed. The right ovarian torsion was reversed and the haemorrhagic ovarian cyst was drained.

RESULTS: Patient was discharged home on the 3rd post operative day. The patient has since been seen in the antenatal clinic and is doing well. The cytology done reported no malignancy.

CONCLUSIONS: Laparoscopic reversal of torsion and cyst drainage during pregnancy has been reported in a few case reports in the past. It has produced good outcomes. Left upper quadrant open entry with 10mm port has been described. We have described our technique that we have used in this case.

REFERENCES:

1. Bassil S, Steinhart U, Donnez J. Successful laparoscopic management of adnexal torsion during week 25 of a twin pregnancy. *Human Reproduction*. 1999;14(3):855-7.
2. Djakovic A, Honig A, Gross M, Dietl J. Adnexal torsion in a patient with bichorial twin pregnancy in the 21st week of gestation treated by open laparoscopy: a case report. *Archives of gynaecology and Obstetrics*. 2006;274(4):248-9.
3. Pan HS, Huang LW, Lee CY, Hwang JL, Chang JZ. Ovarian pregnancy torsion. *Archives of gynaecology and Obstetrics*. 2004;270(2):119 – 21.

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AN EIGHT YEAR SERIES OF LAPAROSCOPIC CYSTECTOMY IN PREGNANCY

THURSDAY 27 MAY / FREE COMMUNICATIONS B
ONCOLOGY / PREGNANCY MASSES / 1503-1512

Hazim WA, Puteri L, Noraihan MN

INTRODUCTION/OBJECTIVE: To evaluate the maternal fetal outcome of laparoscopic ovarian cystectomy in pregnancy.

MATERIALS/METHOD: A cross sectional study with descriptive analysis of the retrospective data collected from the electronic medical records, of

women with ovarian cystectomy from Jan 2000 till 2007. We then focused on those who were pregnant and had a cystectomy performed.

RESULTS: In 249 laparoscopic cystectomy, 41 cases were ovarian cyst in pregnancy. The prevalence was 1.4 per 1000 deliveries. 37 cases out of 47, were surgically treated via laparoscopic cystectomy. The mean age was 28.3 years old. The gestational age ranges from 5 weeks to 20 weeks. The mean gestation in which the surgery was performed was 14 weeks. The duration of surgery was 86.3 minutes and average blood loss was 170mls. Only one case was converted to laparotomy. There was no miscarriage, contraction or per vaginal bleeding post operatively. There were no visceral injuries in this series. Two patients had wound infection and were treated as outpatient. One had preterm contraction at 28 weeks but the pregnancy progressed till term. The duration of hospital stay was 3.9 days. The average gestation age of delivery was 37.5 weeks and mean birth weight was 2.9kg. There was no admission to the neonatal intensive care and the AS were 9/10. However there was 1 fresh still birth but it was due to abruptio placenta. The two commonest tumours were mature teratoma and endometrioma.

CONCLUSIONS: Laparoscopic ovarian cystectomy in pregnant women is safe and feasible. However further randomized controlled trials with a large sample size should be performed.

REFERENCES:

1. Andreoli M, Servakov M, Meyers P, Mann WJ Jr (1999). Laparoscopic surgery during pregnancy. *J Am Assoc Gynecol Laparosc*. 6(2):229-33.
2. Tanaka H, Futamura N, Takubo S, Toyoda N (1999). Gasless laparoscopy under epidural anesthesia for adnexal cysts during pregnancy. *J Reprod Med*. 44(11):929-32.
3. Fatum M, Rojansky N (2001). Laparoscopic surgery during pregnancy *Obstet Gynecol Surv*. 56(1):50-9.

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LARGE OVARIAN CYST IN PREGNANCY: PORT PLACEMENT AND TECHNIQUE

THURSDAY 27 MAY / FREE COMMUNICATIONS B
ONCOLOGY / PREGNANCY MASSES / 1512-1521

Wang L, Tsaltas J, Najjar H

INTRODUCTION: Ovarian cysts are commonly found, but when discovered during pregnancy, decision need to be made regarding immediate surgery or conservative management until delivery, other considerations including mode of delivery and the likelihood of ongoing enlargement or torsion during the pregnancy that may require emergency surgery.

We present a video of a case of a 19 year old G1P0, who had an incidental finding of an ovarian cyst during her pregnancy. She initially presented to her GP at 15 weeks of gestation, without preceding antenatal care. Obstetric ultrasound to date the pregnancy showed a viable 15 week singleton pregnancy and a 10cm complex ovarian cyst with large solid and cystic components. Her tumour markers showed mildly elevated alpha-fetoprotein in keeping with pregnancy, other markers were not elevated. At Laparoscopy, we found a large ovarian cyst in the POD that required removal. We demonstrate our port placement in this situation and removal of the pathology.

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Free Communications Abstracts SESSIONS B/C

**DIAGNOSTIC AND MANAGEMENT DILEMMA:
INCIDENTAL DIAGNOSIS OF LEIOMYOSARCOMA
FOLLOWING LAPAROSCOPIC MYOMECTOMY**

THURSDAY 27 MAY / FREE COMMUNICATIONS B
ONCOLOGY / PREGNANCY MASSES/ 1521-1530

Khong S-Y, Lam A, Robertson G, Gard G

INTRODUCTION: Uterine fibroid is one of the most common gynaecological pathology. It occurs in 30-70% of women of childbearing age. Majority of fibroids are managed expectantly as the women are asymptomatic. Rarely however, fibroids can undergo sarcomatous degeneration. The true incidence is unknown but has been quoted to be between 0.1 to 0.2%.

CASE: We would like to present the management of a 31 year old nulliparous patient who was diagnosed with leiomyosarcoma after undergoing her second laparoscopic myomectomy.

Miss S, was referred to our unit by her gynaecologist in January 2009 with severe dysmenorrhoea, premenstrual back pain and urinary frequency. Clinical examination and imaging studies confirmed a 20 week size multifibroid uterus. She underwent laparoscopic myomectomy in February 2009 for two large anterior broad ligament fibroids. Histology revealed benign leiomyomas. Advice was given to defer pregnancy for at least 6 months and that a caesarean section for future childbirth may be required. She was keen to start a family at this stage.

Surprisingly, a follow up ultrasound scan 4 months later showed a 6x5cm leiomyoma. As she was asymptomatic, plans were made to follow her up in 6 months with a repeat scan. In October 2009, she was admitted to hospital with heavy vaginal bleeding, nausea and back pain. Ultrasonography showed that the fibroid had grown significantly to 9 x 9 x 8cm with a 4cm complex left ovarian cyst. Follow up in January 2010 showed that the fibroid had continue to enlarge (12 x 9 x 8cm) despite Zoladex injections.

At laparoscopy, a 15 x 12cm fibroid was found in the low anterior uterus extending inferiorly towards the cervix, filling the uterovesical pouch and posteriorly into the Pouch of Douglas. Half of the fibroid was excised laparoscopically and morcellated through a 15mm port. Conversion to a laparotomy was necessary to remove the remaining fibroid as it was technically impossible to grasp and retract adequately on the disintegrating tissue. Histology subsequently confirmed leiomyosarcoma.

DISCUSSION WILL INCLUDE:

1. Intraoperative features which may increase surgeon's suspicion of a sarcomatous fibroid.
2. Risk of tumour seedling with specimen morcellation.
3. Pathology diagnostic criteria.
4. Postoperative management.
5. Prognosis.

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**COMPLICATIONS AT OPERATIVE HYSTEROSCOPY
REQUIRING REINTERVENTION: A RETROSPECTIVE STUDY**

THURSDAY 27 MAY / FREE COMMUNICATIONS C
FIBROIDS / HYSTERECTOMY / HYSTEROSCOPY
1400-1409

Schoneveld AL, Vanderlinden S, Dedecker A

INTRODUCTION: To determine the incidence of complications in operative hysteroscopy requiring further surgical procedures.

MATERIALS/METHOD: Data were collected from the electronic database of the European Hospitals, Brussels. All operative hysteroscopic procedures (including polypectomy, endometrial resection, myomectomy, etc) between March 1st 2008 and December 31st 2009 were included in the study.

RESULTS: A total of 192 operative hysteroscopic procedures were performed. Of these patients 62(32.3%) had a polypectomy, 18(9.4%) a myomectomy, 41(21.4%) a resection of a placentalrest, 17(8.8%) an endometrial ablation and 54 (28.1%) had a combined polypectomy with endometrial ablation. Of these 7 (3.6%) had a complication noted with uterine perforation occurring in 5(2.6%) of cases. All except two cases were managed conservatively. Other complications were bleeding (0.5%) and post-operative infection (0.5%). Fluid overload did not occur.

Postmenopausal patients were significantly more likely to have a complication than premenopausal patients ($p < 0.01$). 2/192 (1.0%) women required a further surgical procedure. In one case a lesion of the ureter was damaged during a polypectomy with the use of a loop resectoscope. At the moment of perforation no electro coagulation was used. The lesion was repaired with the use of a stent. The second case was also a perforation during a polypectomy which caused bleeding in a vessel in the ileocaecal region. Again no electro coagulation was used at the moment of perforation. A laparotomy was performed to ligature of the vessels. Both women were postmenopausal.

CONCLUSIONS: Operative hysteroscopy is a relatively safe operative procedure for benign gynecological problems compared to a hysterectomy¹. The general complication rate in literature ranges from 0.28% to 3.9%. The perforation rate ranges from 0.16% to 1%.^{2,3} Surgical intervention like laparotomy is described in 2% of patients³. Despite the low complication rate, a thorough follow-up after encountering uterine perforation is mandatory, especially when operating on the postmenopausal patient.

REFERENCES:

1. Lethaby A, Shepperd S, Cooke I, Farquhar C. Endometrial resection and ablation versus hysterectomy for heavy menstrual bleeding. *Cochrane Database Syst Rev.* 2000;(2):CD000329.
2. Jansen FW, Vredevoogd CB, van Ulzen K, Hermans J, Trimbos JB, Trimbos-Kemper TC. Complications of hysteroscopy: a prospective, multicenter study. *Obstet Gynecol.* 2000 Aug;96(2):266-70.
3. Istre O. Managing bleeding, fluid absorption and uterine perforation at hysteroscopy. *Best Pract Res Clin Obstet Gynaecol.* 2009 Oct;23(5):619-29. Epub 2009 Apr 16.

AUTHOR AFFILIATION: A. L. Schoneveld, S. Vanderlinden, A. Dedecker; St Elisabeth Hospital, Ukkel, Belgium

Free Communications Abstracts SESSION C

THE FIBROID NECKLACE

THURSDAY 27 MAY / FREE COMMUNICATIONS C
FIBROIDS / HYSTERECTOMY / HYSTEROSCOPY
1409-1418

Aust T, O'Neill A, Chou D, Rosen D, Cario G

INTRODUCTION: When performing laparoscopic myomectomy for multiple fibroids it is possible that some of the excised myomas become misplaced or overlooked in the abdomen in the time between excision and morcellation.

MATERIALS/METHOD: During a laparoscopic myomectomy for a total of eight subserosal and intramural myomas were threaded onto a monofilament suture. Once the defects were repaired the morcellator was introduced and the fibroids were removed one by one and extracted.

RESULTS: None of the fibroids were lost and the formation of the fibroid necklace avoided the need to keep count of the number of myomas collected and removed.

CONCLUSIONS: This technique is useful to keep track of tissue during laparoscopic multiple myomectomies.

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A NOVEL TECHNIQUE FOR OPENED UTERINE CAVITY IN DEEP INTRAMURAL FIBROIDS: TWO STEP BOTTOM UP SUTURING TECHNIQUE IN LAPAROSCOPIC MYOMECTOMY

THURSDAY 27 MAY / FREE COMMUNICATIONS C
FIBROIDS / HYSTERECTOMY / HYSTEROSCOPY
1418-1427

Oku H, Matsumoto T, Saeki A, Hashimoto Y, Kuramori R, Akashi Y, Chien HW, Morishita M, Ikuma K

INTRODUCTION: It is important to repair myometrial defect securely in laparoscopic myomectomy for future pregnancy. Inadequate restoration of ruptured uterine cavity may increase the risk of post-operative hematoma, iatrogenic adenomyosis or uterine rupture during pregnancy. We report the novel technique to suture the opened uterine cavity and myometrial defect securely and safely by "Two-step bottom up closure method".

OPERATIVE TECHNIQUE: A transverse incision is made on the serosa overlying the fibroid using ultrasonic scalpel. While the assistant retracts the fibroid to the right side with tenaculum forceps, the surgeon starts continuous suturing of the uterus with #0 Vicryl from the left edge of myometrial defect during enucleation of the fibroid. As if the uterine cavity is unexpectedly opened, the closure of the endometrial defect is immediately started with #3-0 PDSII continuous suture from the left edge of the defect before the fibroid is completely enucleated. The suturing of myometrial defect is restarted in two or three layers and the last serosal layer was closed using #3-0 PDSII continuously.

RESULT: Seven patients had undergone "Two step bottom up closure method" in laparoscopic myomectomy, and all cases were successfully treated. The mean operation time was 109.4 (range, 51–192 minutes), blood loss was 44.3 (range, 5 -175mL), weight of myoma was 114.9 (range, 19 -385), number of myomas were 3.4 (range, 1-10).

CONCLUSION: Our new technique of "Two step bottom up closure method" for laparoscopic myomectomy is feasible and safe for future childbearing ability for patients with deep intramural fibroids penetrating uterine cavity.

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URETERIC INJURY FOLLOWING OPERATIVE HYSTEROSCOPY: A CASE REPORT

THURSDAY 27 MAY / FREE COMMUNICATIONS C
FIBROIDS / HYSTERECTOMY / HYSTEROSCOPY
1427-1436

Schoneveld A, Vanderlinden S, Depierreux A, Dedecker A

INTRODUCTION: Operative hysteroscopy has become the standard procedure to treat benign uterine pathology in a minimally invasive fashion¹.

A perforation of the uterine myometrium is the most common complication². When this OCCURS, ONE CAN POTENTIALLY DAMAGE THE ADJACENT INTRA-ABDOMINAL ORGANS IN THE PELVIS.

MATERIALS/METHOD: This case report describes the occurrence of a ureteric lesion after perforating the uterine cavity while performing an operative hysteroscopy.

RESULTS: A 62-year old G2P2 patient was admitted to our one-day clinic to undergo endometrial resection. Pre-operative investigations showed the presence of simple endometrial hyperplasia, without atypia. During the procedure, a perforation of the uterine fundus occurred with a 10mm resectoscope.

She was admitted to our gynecology unit for a 24 hour period and given intravenous antibiotics; cefuroxim 2x 750mg, amikacine 2x 500mg and metronidazol 3x 500 mg.

The patient was re-admitted five days post surgery with persistent abdominal pain. Blood analysis showed an elevation of leucocytosis 11,400/mm³ and CRP 21.9. CT-scan showed an inflammatory structure in the Douglas. The patient was again treated with intravenous antibiotics and underwent operative laparoscopy. This revealed a perforation of the uterine fundus and presence of inflammatory tissue in the right pararectal space. No perforation of any pelvic organs were diagnosed. The uterine perforation was sutured, the inflammatory tissue was washed out and an intra-abdominal drain was left in place.

The following day the patient complained of ongoing abdominal pain. The abdominal drain fluid was diagnosed as urine. A CT-scan showed the image of a pin-point lesion of the right ureter, located infero lateral from the right ovary. A double J-stent was put in place and the patient recovered uneventfully.

CONCLUSIONS: When perforating the uterine cavity during operative hysteroscopy, secondary damage to any pelvic organ can occur, even to the ureter.

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Immediate or delayed thermal damage has to be excluded during postoperative follow-up.

REFERENCES:

1. Lethaby A, Shepperd S, Cooke I, Farquhar C. Endometrial resection and ablation versus hysterectomy for heavy menstrual bleeding. *Cochrane Database Syst Rev.* 2000;(2):CD000329.
2. Jansen FW, Vredevoogd CB, van Ulzen K, Hermans J, Trimbos JB, Trimbos-Kemper TC. Complications of hysteroscopy: a prospective, multicenter study. *Obstet Gynecol.* 2000 Aug;96(2):266-70.

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LAPAROSCOPIC MANAGEMENT OF PARASITIC MYOMA

THURSDAY 27 MAY / FREE COMMUNICATIONS C
FIBROIDS / HYSTERECTOMY / HYSTEROSCOPY
1436-1445

O'Neill A, Aust T, Rosen D, Chou D, Cariogm

INTRODUCTION: Parasitic myomas may occur spontaneously as pedunculated subserosal myomas lose their uterine blood supply and parasitize to other organs. More parasitic myomas may be iatrogenically created after surgery, particularly surgery using morcellation techniques.

MATERIALS/METHODS: We present two cases of parasitic myoma that presented as pelvic masses and were managed laparoscopically. We highlight the difficulties associated with this particular myoma presentation.

CONCLUSION: With increasing laparoscopic myomectomy rates, surgeons should be informed of the potential for iatrogenic parasitic myoma formation, their likely increasing frequency, and intraoperative precautions to prevent their occurrence.

REFERENCES:

1. Kho KA, Nezhac C. Parasitic myomas. *Obstet Gynecol* 2009;114(3):611-615

AUTHOR AFFILIATION: A. O'Neill, T. Aust, D. Rosen, D. Chou, G. M. Cario; Sydney Womens Endosurgery Centre, St George Private Hospital, Kogarah, NSW, Australia

PREDICTION OF THE NEED FOR MORCELLATION AT TOTAL LAPAROSCOPIC HYSTERECTOMY (TLH) FROM PRE-OPERATIVE 3-D VOLUMETRIC ULTRASOUND – ESTIMATED UTERINE WEIGHT

THURSDAY 27 MAY / FREE COMMUNICATIONS C
FIBROIDS / HYSTERECTOMY / HYSTEROSCOPY
1445-1454

Alhamdan D, Bignardi T, Reid S, Mongelli M, Chou D, Condous G

INTRODUCTION: To validate an algorithm to predict the need for morcellation at TLH from pre-operative 3-D volumetric ultrasound-estimated uterine weight and patient characteristics.

MATERIALS/METHOD: This is an ongoing prospective study on women undergoing TLH. Data collected includes woman's age, parity, height, weight, 3-D ultrasound estimated uterine volume, blood loss and dry weight

as measured by our pathology service. Volume data sets were analyzed using virtual organ computer-aided analysis (VOCAL) with regards to the uterine volume. The uterine volume was manually calculated with VOCAL in the longitudinal plane with 30 degrees rotation steps. A previously published algorithm to estimate the probability of morcellation was applied to this database.

RESULTS: A total of 25 cases had complete data suitable for testing of this algorithm. The mean age was 45.5 years (SD 6.4), the ultrasound estimated volumes ranged from 26.4mL to 1507mL. Morcellation was required in 14/25 cases. The algorithm was correct in predicting the need for morcellation for all of these cases. The sensitivity 61%, specificity 100%, PPV 100% and NPV 82%. The overall accuracy of the method was 76%.

CONCLUSIONS: The need for morcellation at TLH can be predicted before surgery using 3-D ultrasound with a fair degree of accuracy.

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LAPAROSCOPIC MYOMECTOMY IN LARGE FIBROIDS

THURSDAY 27 MAY / FREE COMMUNICATIONS C
FIBROIDS / HYSTERECTOMY / HYSTEROSCOPY
1454-1503

Nikam Y, Merkur H

This presentation is a series of short video recordings of large fibroids in various scenarios removed laparoscopically.

INTRODUCTION: Myomectomy has always been traditionally done via laparotomy. For the last few years more and more surgeons have started doing this procedure laparoscopically. Removing large fibroids is still considered as a laparoscopic challenge. These video recordings cover the following essential steps of Myomectomy

- Safe entry
- Devascularization
- Separation of fibroid from uterus
- Closure of uterine muscle
- Retrieval of fibroid

MATERIALS/METHOD: Video presentation

REFERENCES: Acknowledgements: Dr Rakesh Sinha

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Free Communications Abstracts SESSION C

IS OFFICE HYSTEROSCOPY SUITABLE AS A DIAGNOSTIC SCREENING PROCEDURE IN MENOPAUSE?

THURSDAY 27 MAY / FREE COMMUNICATIONS C
FIBROIDS / HYSTERECTOMY / HYSTEROSCOPY
1503-1512

Ceci O, Bettocchi S, Pinto L, Laera AF, Achilarré MT, Mangiatordi G, Chiarulli EF, Selvaggi L

INTRODUCTION: To verify the use of Office Hysteroscopy as a screening tool for endometrial carcinoma in menopausal women, we performed hysteroscopy not only for patients suffering abnormal uterine bleeding (AUB) or with a thick endometrium (at transvaginal ultrasound), but also in patients with a thin endometrium, suffering or not AUB.

MATERIALS/METHOD: 443 postmenopausal patients were enrolled (January 2005 - December 2009) and divided in 4 groups on the grounds of AUB and endometrial thickness. Every patients underwent office hysteroscopy and, when necessary, endometrial targeted biopsies and minimal surgical procedures (polypectomy, miomectomy, adhesiolysis). Hysteroscopic findings were compared with pathological results.

Statistical analysis was carried out by using the ANOVA test with a 95% confidence interval (CI). Unpaired Student's t-test was used considering a p value < .05 to be statistically significant.

RESULTS: Of 443 patients, 79 (17.83%) suffered AUB. Of them, 27 (6.09%) (group 1) had endometrial thickness \leq 4mm, while 52 (11.74%) (group 2) > 4mm.

364 patients (82.17%) did not suffer AUB, of them 267 (60.27%) (group 3) had endometrial thickness > 4mm, while 97 (21.90%) (group 4) \leq 4mm.

Pathologies were detected by hysteroscopy in five patients (18.52%) of group 1, 38 (73.08%) of group 2, 188 (70.41%) of group 3, 39 (40.21%) of group 4. Risk ratio (RR) for pathologies in group 1 was 0.28 (CI 95% = 0.126-0.6176), in group 2 1.21 (CI 95% = 1.0171-1.4437), p = 0.031, in group 3 1.49 (CI 95% = 1.2638-1.7677), p = 0.000001435, in group 4 0.63 (CI 95% = 0.4939-0.795).

Endometrial carcinoma was detected in 11 (21.15%), 15 (5.62%) and 1 (1.03%) patients of group 2, 3, and 4 respectively with a correspondence between hysteroscopic findings and pathological results in 96.3% cases. RR for endometrial cancer in group 2 was 1.1917 (95% CI = 1.0265-1.3835), in group 3 1.3645 (95% CI = 1.1814-1.5760), in group 4 0.6448 (95% CI = 0.5206-0.7987).

CONCLUSIONS: Study results confirm the necessity of hysteroscopic evaluation in all the patients with an endometrial thickness > 4mm, independently by AUB. There is no statistical evidence to perform hysteroscopy in menopausal patients with an endometrial thickness \leq 4mm, with or without AUB. In spite of these results we found endometrial carcinoma in one asymptomatic patient with a thin endometrium (group 4). The study highlights that hysteroscopy, not statistically reliable as a screening tool, could increase the chance of early diagnosis.

REFERENCES:

- Ceci O, Bettocchi S, Pellegrino A, Impedovo L, Di Venere R, Pansini N. Comparison of 1 hysteroscopic and hysterectomy findings for assessing the diagnostic accuracy of office hysteroscopy. *Fertil Steril*. 2002 Sep;78(3):628-31.
- Goldstein SR. The role of transvaginal ultrasound or endometrial biopsy in the evaluation of the menopausal endometrium. *Am J Obstet Gynecol*. 2009 Jul;201(1):5-11.

- Schmidt T, Breidenbach M, Nawroth F, Mallmann P, Beyer IM, Fleisch MC, Rein DT. Hysteroscopy for asymptomatic postmenopausal women with sonographically thickened endometrium. *Maturitas*. 2009 Feb 20;62(2):176-8.

AUTHOR AFFILIATION: O. Ceci, S. Bettocchi, L. Pinto, A. F. Laera, M. T. Achilarré, G. Mangiatordi, E. F. Chiarulli, L. Selvaggi; Department of Gynecology, Obstetrics and Neonatology, Bari, Italy

USE OF VERSAPOINT IN PATIENTS FACING A DIFFICULT EMBRYO TRANSFER

THURSDAY 27 MAY / FREE COMMUNICATIONS C
FIBROIDS / HYSTERECTOMY / HYSTEROSCOPY
1521-1530

Mahajan N

INTRODUCTION: Difficult embryo transfers (ET) have been documented to compromise pregnancy rates in In vitro fertilization (IVF). Interventions during transfer lead to trauma of the endocervix and endometrium resulting in bleeding¹. Cervical dilatation done prior to the IVF cycle is not beneficial to all patients. Shaving of the cervical canal has been tried to improve quality of transfer². Aim of the study was to evaluate the procedure of surgical correction or re-fashioning of the cervical canal with versapoint to improve ease of embryo transfer in patients who did not respond to cervical dilatation.

MATERIALS/METHOD: 13 patients with history of a very difficult ET despite going through cervical dilatation prior to their IVF cycle were taken into the study. In their previous ET negotiation of the cervical canal had to be carried out ultimately with a metal outer sheath. Both the outer and inner transfer catheter were covered with blood. A pre-IVF diagnostic hysteroscopy had revealed the following cervical canal abnormalities, false passage in the cervix in 4 patients, tortuous cervical canal in 5 and a severely fibrotic os in 4.

For the study patients were taken up for hysteroscopy under general anaesthesia using a Versascope. In patients with fibrotic Os 1 or 2 linear releasing incisions were made with the versapoint electrode, extending from the posterior aspect of the internal Os towards the external Os for approximately 1cm. In patients with a tortuous cervical canal several projecting ridges were seen arising from the anterior, posterior and/or lateral walls of the cervical canal, linear incisions were made into these projections and a straightening of the canal was achieved. When a false passage was identified tissue between the actual canal and false passage was cut thus leaving a clean path. Adequacy of procedure was confirmed by introducing a dummy ET catheter. There were no complications related to the procedure. Four weeks after surgery a mock ET was performed.

RESULTS: No difficulty was encountered in the subsequent mock ET in any of the patients. IVF- ET done in 11/13 patients was smooth with no blood on the catheter. 5 of the 11 patients achieved pregnancy. 2 patients are still to go for IVF.

CONCLUSIONS: Versapoint is an excellent tool to refashion the cervical canal and correct cervical canal abnormalities in IVF patients confronted with difficult embryo transfers.

REFERENCES:

- Groutz A, Lessing J, Wolf Y, Yovel I, Azem F, Amit A. Cervical dilation during ovum pick-up in patients with cervical stenosis: effect of pregnancy outcome in an in vitro fertilization-embryo transfer program. *Fertil Steril* 1997;67:909 – 11.
- N.Noyes. Hysteroscopic cervical canal shaving: a new therapy for cervical stenosis before embryo transfer in patients undergoing in vitro fertilization. *Fertil Steril* 1999; 71:(5) 965-66.

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Free Communications Abstracts SESSIONS D

WHAT IS SONOVAGINOGRAPHY AND HOW CAN IT HELP THE LAPAROSCOPIC SURGEON?

THURSDAY 27 MAY / FREE COMMUNICATIONS D
GENERAL SURGERY / 1400-1409

Reid S, Bignardi T, Alhamdan D, Reid G, Condous G

OBJECTIVE: To use sonovaginography (SVG) to predict the severity and location of endometriosis prior to laparoscopic surgery.

INTRODUCTION: To date, there is a lack of a reproducible, accurate pre-operative ultrasound assessment for women with chronic pelvic pain, prior to surgery. Often a "normal" pelvic ultrasound report is followed by a positive laparoscopy for endometriosis. The aim of this study is to use a new ultrasound technique, sonovaginography (SVG), to predict endometriosis location and severity in women planned for laparoscopic endometriosis surgery and in turn challenge the conventional ultrasound reporting of a "normal" pelvis.

METHODS: This is a continuing, prospective observational study, which started in June 2009. The study included reproductive women with a history of any of the following: chronic pelvic pain, dysmenorrhoea, dyspareunia, dyschezia, or a history of previous endometriosis with recurrent symptoms. All women were planned for laparoscopic endometriosis surgery. A history was obtained and an ultrasonographic evaluation with SVG was performed on all women prior to laparoscopy. SVG is a new technique, based on transvaginal (TV) ultrasonography, combined with the introduction of gel into the posterior fornix. The gel creates an acoustic window between the TV probe and the surrounding structures of the vagina. During SVG, the following structures may be visualised: Anterior and posterior vaginal fornices, anterior and posterior vaginal walls, retrocervical area, uterosacral ligaments, pouch of Douglas, rectovaginal septum, and rectosigmoid colon. In this study, SVG was used to predict obliteration of the POD and posterior compartment deep infiltrative endometriosis (DIE). Women underwent laparoscopic surgery for diagnosis and, if necessary, surgical treatment of endometriosis. The correlation between SVG findings and laparoscopic findings was then analysed to assess the ability of SVG to predict obliteration of the POD in conjunction posterior compartment DIE.

RESULTS: To date, complete SVG and laparoscopic data was available for 21 women who underwent SVG, followed by laparoscopy. The sensitivity and specificity for SVG in the prediction of POD obliteration in conjunction with DIE were 100% and 94%, respectively. The PPV and NPV were 83% and 100%, respectively.

CONCLUSION: SVG is useful for the laparoscopic surgeon as it can aid in planning specific surgery and the need for colorectal input in women with endometriosis. SVG may also negate the need for 2 laparoscopies, as it aids in deciding who does the surgery and where the surgery is done (i.e. the need for surgery at a Tertiary Laparoscopic Surgical Unit).

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TIPS & TRICKS FOR LAPAROSCOPY MADE EASY

THURSDAY 27 MAY / FREE COMMUNICATIONS D
GENERAL SURGERY / 1409-1418

Siow A

INTRODUCTION: Laparoscopy is becoming the standard of care in gynecological surgery. Although it has numerous benefits for the patients, there are certain shortcomings in terms of fixed port position, ergonomic constraints, instrument limitations and surgical challenges with large pathology. Over the last 10 years, we at the minimally Invasive Surgery Centre at KK Women's & Children's Hospital, Singapore have developed a series of innovative tricks using inexpensive readily available surgical supplies to overcome some of these shortcomings. In addition we have also come to realize some surgical tips that can simplify certain laparoscopic procedures. We present a compilation of tips and tricks to make laparoscopy easy and manageable.

MATERIALS/METHOD: Surgical illustrations of tips and tricks in gynecology laparoscopy.

RESULTS: We have routinely employed these tips and tricks to compliment our conventional laparoscopy with much improved surgical efficiency.

CONCLUSIONS: Innovative tips and tricks can make laparoscopic surgery easy and manageable.

AUTHOR AFFILIATION: A. Siow; KK Women's & Children's Hospital Singapore

THE VALUE OF PRE-OPERATIVE ULTRASOUND IN TRIAGING WOMEN WITH ADNEXAL PATHOLOGY FOR ADVANCED LAPAROSCOPIC SURGERY

THURSDAY 27 MAY / FREE COMMUNICATIONS D
GENERAL SURGERY / 1418-1427

Alhamdan D, Bignardi T, Reid S, Lu C, Reimke J, Casikar I, Mongelli M, Condous G

INTRODUCTION: We aim to establish the benefit of pre-operative transvaginal scanning (TVS) in predicting the feasibility of advanced laparoscopic adnexal surgery.

MATERIALS/METHOD: This is a prospective ongoing study (July 2006 till April 2010). All women who attended the outpatient One-Stop Gynecology clinic with a clinical or ultrasound diagnosis of an adnexal cyst were offered a detailed TVS in order to assess the feasibility of advanced laparoscopic adnexal surgery. The adnexal lesions were classified as benign or malignant according to the IOTA pattern recognition method. The size, echogenicity and papillary structures of the mass were noted. An initial ultrasound classification of the mass was made; all benign and borderline lesions were booked for a laparoscopic approach and all malignant lesions were referred to Gynaecological Oncology for staging laparotomy. Ovarian cysts of any size were included.

RESULTS: 61 women (with 71 adnexal masses, 10 women with bilateral cysts at surgery) to date have been included in the study, 48

Free Communications Abstracts SESSION D

premenopausal and 13 postmenopausal. On histological examination, 85.91% (n=61) of adnexal cysts were benign, 5.64% of cysts (n=4) were borderline malignancy, 7.04% (n=5) were primary malignancy and 1.41% (n=1) was secondary malignancy. The advanced laparoscopic surgery was successfully completed in 56/57 cases. One had a 34 week ovarian mass with adhesiolysis (previous ileostomy for necrotizing enterocolitis as a neonate) which histologically was confirmed to be a hemorrhagic corpus luteal cyst. This case was done laparoscopically but mini-laparotomy was performed for delivery of the massive ovarian cyst. Four women had primary laparotomy for malignancy; one presented with an acute abdomen and a 20 week ovarian mass thought to have torsed. Histology demonstrated secondary ovarian malignancy from the colon. The other three were referred to Gynaecology Oncology for a staging laparotomy with total abdominal hysterectomy and bilateral salpingo-oophorectomy for primary ovarian cancer. The pre-operative TVS assessment predicted the successful outcome of advanced laparoscopic surgery with a sensitivity of 75%, specificity of 100%, PPV 99% and NPV 96.2%.

CONCLUSIONS: Although the numbers are very small, a detailed pre-operative TVS is useful in predicting the feasibility of advanced high-level laparoscopic adnexal surgery. Pattern recognition of ovarian cysts is an essential part of the pre-operative work-up in women planned for laparoscopic adnexal surgery.

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HAS ROBOTIC-ASSISTED SURGERY COME OF AGE?

THURSDAY 27 MAY / FREE COMMUNICATIONS D
GENERAL SURGERY / 1427-1436

Law K, Tam KF, Ngan H

Many gynaecological procedures can now be performed using either conventional laparoscopy or robotic-assisted surgery, such as the da Vinci[®] Surgical System. Each has its own advantages and disadvantages. Experienced laparoscopic surgeons may argue that they can perform most of the gynaecological procedures using conventional laparoscopy. So is there a need to use a multi-million dollar robotic-assisted surgical system?

This video presentation concurrently displays video clips of similar procedures being performed by conventional laparoscopy and robotic-assisted surgery on the same screen. This will allow the audience to directly appreciate the key differences and perhaps advantages of the robotic-assisted surgical system, and how the conventional laparoscopist can employ various compensatory techniques to obviate the need for these "advantages".

Robotic-assisted surgery facilitates surgical procedures by allowing the surgeon to sit comfortably while visualizing the whole abdomino-pelvic cavity in three-dimensions with magnification. Vision is further enhanced by the lack of tremor in the robotic camera system. The articulated instruments allow more flexibility in the range of surgical motion. All of these combine to improve the surgeon's dexterity and precision.

In a major gynaecological oncology unit in Hong Kong, robotic-assisted surgery is being used increasingly for procedures such as radical hysterectomy and pelvic or para-aortic lymph node dissection. For these long complex operations, robotic-assisted surgery has certainly been very useful. However, will robotic-assisted surgery also play an increasing role in general gynaecological surgery?

Whilst it is true that conventional laparoscopy lacks three-dimensional visualization and perception of depth, this can be overcome by the use of visual cues, such as shadowing and size relativity. Likewise, whilst the range of movement of instruments within the abdomino-pelvic cavity is limited by the fact that conventional laparoscopic instruments are straight, this can be overcome by optimizing port positioning, or even with the use of single port instruments. Finally, whilst vision can sometimes be impaired by tremor and the skill of the surgical assistant, this can be overcome by the use of arm rests and by standing on higher platforms.

So for now, experienced laparoscopic surgeons will still continue to perform many gynaecological procedures with conventional laparoscopy, despite the advantages offered by robotic-assisted surgical systems. Nonetheless, as the technology continues to improve, as more hospitals install the robotic-assisted surgical systems, and as the cost falls, robotic-assisted surgery may still come of age in the future of gynaecological surgery.

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LAPAROSCOPIC REPAIR OF CAESAREAN SCAR DEHISCENCE

THURSDAY 27 MAY / FREE COMMUNICATIONS D
GENERAL SURGERY / 1436-1445

Tai WC, Anpalagan A, Tong A

INTRODUCTION: Uterine scar dehiscence after caesarean section occurs in 0.3-1.9% of patient who had previous caesarean sections. Various repair techniques have been described: vaginal approach, laparoscopy-assisted vaginal approach, laparoscopic and abdominal approach. In this case report, we described a case of caesarean scar defect which was repaired by laparoscopy.

CASE: A 34 year old patient, Gravida 4 Para 3, with one previous caesarean section, presented 3 days post dilatation and curettage for blighted ovum, with severe abdominal cramp. Ultrasound showed a bicornuate uterus with a 1.9mm thick myometrium at the isthmic portion of the uterus. A 65mL collection was also noted at the isthmic portion of the uterine cavity. A diagnostic laparoscopy was performed and confirmed perforation at previous caesarean scar. These findings and the possibility of repairing the caesarean section scar was discussed with the patient. She returned to theater four weeks after the original procedure where the haematoma was evacuated and the scar was repaired. She had an uneventful post-op recovery, and remained well at follow-up visit one month later.

CONCLUSION: Due to limited data from the literature, the optimal management strategy of thin uterine scar is still not clear. Conservative management, fertility sparing surgical repair, and hysterectomy have all been described in various case reports as possible management options. From our experience in the above case, laparoscopic repair of caesarean scar dehiscence is feasible with good surgical outcome, especially if preservation of fertility is desired by the patient.

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REFERENCES:

1. Donnez O, Jadoul P, Squifflet J, Donnez J. Laparoscopic repair of wide and deep uterine scar dehiscence after cesarean section. *Fertil Steril* 2008 89(4): 974-980.
2. Klemm P, Koehler C, Mangler M, Schneider U, Schneider A. Laparoscopic and vaginal repair of uterine scar dehiscence following cesarean section as detected by ultrasound. *J Perinat Med* 2005 33: 324-331.
3. Khoshonow Q, Pardey J, Uppal T. Transvaginal repair of caesarean scar dehiscence. *The Australian and New Zealand Journal of Obstetrics and Gynaecology* 2010 50: 94-95.

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THE FEASIBILITY AND SAFETY OF LAPAROSCOPIC MANAGEMENT OF ADNEXAL TUMOR IN PEDIATRIC AND ADOLESCENT PATIENTS

THURSDAY 27 MAY / FREE COMMUNICATIONS D
GENERAL SURGERY / 1445-1454

Lee JS

INTRODUCTION: The aim of this study was to analyze the feasibility and safety of laparoscopic surgery for pediatric and adolescent patients with adnexal tumor.

MATERIALS/METHOD: A retrospective analysis was performed on 206 pediatric and adolescent patients who presented with adnexal tumor who underwent laparoscopic surgery.

RESULTS: From 1997 to 2008, a total of 206 pediatric and adolescent patients with adnexal tumor underwent laparoscopic surgery. The mean age of patients was 15 years (range, 2-20 years) and 12% of patients were premenarchal girl. Most common presenting symptom of tumor was abdominal pain. The mean tumor size was 11.5cm (range, 2-50cm). Bilateral tumor was observed in 23% of patients. Operative procedure was salpingo-oophorectomy in 46% of patients, oophorectomy in 11%, and cystectomy in 43% of patients. The mean operating time was 48min (range, 36-78min). No patients required perioperative transfusion. There was no severe complication requiring laparosconversion or reoperation. Postoperative course was uneventful in all patients.

CONCLUSIONS: Laparoscopic surgery for pediatric and adolescent patients with adnexal tumor was feasible in all patients and could be performed safely even in patients with huge mass.

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LAPAROSCOPIC PERITONEAL GRAFT FOR VAGINOPLASTY

THURSDAY 27 MAY / FREE COMMUNICATIONS D
GENERAL SURGERY / 1454-1503

Kotdawala P

INTRODUCTION: We are all performing vaginoplasty with various grafts for the lining of neo-vagina. Overall consensus has emerged of late about preference for a split thickness skin graft from the medial aspect of thighs in the same patient (a classic operation described by 'McIndoe'). There are some misgivings though, especially the brown pigmentations and leathery feel of this graft. In search of a softer material AND to avoid the disfiguring effects of skin graft from the thigh, few colleagues are using amniotic membrane as the graft instead of skin. Peritoneal graft without discontinuity seems an excellent option.

MATERIALS/METHOD: Till date peritoneal graft was not considered a good option as the vault forming stitches were given either without checking the surrounding relationship of tissues, or a laparotomy was needed. Using the laparoscopic assistance has been very useful in delineating the upper limit of the neo-vagina, under vision suturing of the vault, evaluation of abdominal organs like ovaries and Genito-Urinary system. A measure of blood supply to the graft area is continued as it is not severed from the abdominal cavity. The property of mesothelial cells of peritoneum for quick implantation on to a raw area also ensures quick and more complete graft uptake.

RESULTS: A case presentation in the form of video clips will be presented to highlight the simplicity of the procedure as well as long term follow-up of the neo-vagina. Along with this data from a personal series of 10 cases will be presented.

CONCLUSIONS: This method appears very attractive from patient's perspective as she avoids the ugly scars and visual reminders on her thigh and also the clean, healthy, pink look of the neo-vagina.

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Free Communications Abstracts SESSION D

TRANS UMBILICAL ENDOSCOPIC SURGERY – INDIAN EXPERIENCE

THURSDAY 27 MAY / FREE COMMUNICATIONS D
GENERAL SURGERY / 1503-1512

Shukla-Kulkarni A

INTRODUCTION: Single-port transumbilical laparoscopy, also known as embryonic natural orifice transumbilical endoscopic surgery (E-NOTES), has emerged as an attempt to further enhance cosmetic benefits and reduce morbidity of minimally invasive surgery. Trans umbilical endoscopic surgery also termed as Single incision laparoscopic surgery is a viable minimally invasive approach to gynecological laparoscopic surgery.

MATERIALS/METHOD: Total laparoscopic hysterectomy done through a single umbilical incision of 2cm. Regular laparoscopic instruments were used with 5mm 30 degree telescope. Mean operating time was 120 min with minimal blood loss.

RESULTS: Patient recovery was excellent, requiring lesser analgesics and was discharged in 48 hours post operatively. Surgical scar was intraumbilical and not visible 6 weeks post op.

CONCLUSIONS: Laparoscopic surgery has reduced post operative recovery time and pain, use of the same instruments through a single incision has further reduced the pain and has better cosmesis.

REFERENCES:

1. Transumbilical single-port surgery: evolution and current status. Canes D, Desai MM, Aron M, Haber GP, Goel RK, Stein RJ, Kaouk JH, Gill IS *Eur Urol.* 2008 Nov;54(5):1020-9. Epub 2008 Jul 14.
2. Single-port laparoscopic surgery: an overview John R. Romanelli & David B. Earle *Surg Endosc* April 2009

AUTHOR AFFILIATION: A. Shukla-Kulkarni; Kokilaben Dhirubhai Ambani Hospital, Mumbai, India.

SINGLE-PORT LAPAROSCOPIC SURGERY IN GYNECOLOGY

THURSDAY 27 MAY / FREE COMMUNICATIONS D
GENERAL SURGERY / 1512-1521

Han C-M, Su H, Wang C-J, Lee C-L

INTRODUCTION: Recently attempts at laparoscopic surgery through a 1-port approach via the umbilicus, referred to as E-NOTES (embryonic natural orifice transumbilical endoscopic surgery), have been introduced in gastroenterology¹ and urology procedures^{2,3}.

The primary advantage of this approach is limiting the port incisions to 1 site, the umbilicus. Therefore the surgical scar can be hidden within the umbilicus, rendering the surgery virtually "scarless."

MATERIALS/METHOD: A prospective study was performed to evaluate patient outcomes after Single-port gynecologic laparoscopy. Demographic data including age, body mass index, port insertion time, operative time, estimated blood loss, operative indications, complications, and postoperative Visual Analog Pain Scale scores were accrued.

RESULTS: Between March 2010 and April 2010, 11 patients underwent Single-port gynecologic laparoscopy. Specifically, 3 patients underwent Single-port laparoscopic adnexal surgery (LSO, 1; Right salpinxectomy, 1; Left salpinxectomy, 1), 7 patients underwent Single-port laparoscopic-assisted vaginal hysterectomy, and 1 patient underwent Single-port laparoscopic myomectomy. Mean patient age was 46 years. Mean body mass index was 24.2kg/m². Mean operative time was 109minutes. Mean estimated blood loss was 136mL. No intraoperative complications occurred. No patients required conversion to standard laparoscopy. Mean length of hospitalization was 2 days. Mean Visual Analog Pain Scale score at discharge was 1.5/10.

CONCLUSIONS: Single port Laparoscopic Surgery seems to be a safe alternative to traditional Laparoscopy for the procedures performed in this study. Surgical time, safety and feasibility is similar, were as the cosmetic result and the post operative pain levels seem to be better accepted by the female patient. Further studies need to be performed and new instrumentation is necessary in order to perform more complicated cases.

REFERENCES:

1. Palanivelu C, Rajan PS, Rangarajan M, Parthasarathi R, Senthilnathan P, Praveenraj P. Transumbilical endoscopic appendectomy in humans: on the road to NOTES: a prospective study. *J Laparoendosc Adv Surg Tech A.* 2008;18:579 – 582.
2. Goel RK, Kaouk JH. Single port access renal cryoablation (SPARC): a new approach. *Eur Urol.* 2008;53:1204 – 1209.
3. Kaouk JH, Haber GP, Goel RK, et al. Single-port laparoscopic surgery in urology: initial experience. *Urology.* 2008;71:3 – 6.

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Free Communications Abstracts SESSION D

SINGLE PORT ACCESS SURGERY – INITIAL EXPERIENCE

THURSDAY 27 MAY / FREE COMMUNICATIONS D
GENERAL SURGERY / 1521-1430

Siow A

INTRODUCTION: Many gynecological procedures can now be tackled laparoscopically. The benefits of this minimally invasive surgical approach are well known to both patients and doctors. A further enhancement of the minimally invasive surgery is Single Port Access Surgery. This new technique takes laparoscopic surgery to the next frontier of minimal access surgery. With advanced multifunction instruments like the Gyrus Advanced Bipolar as well as articulated and bended instruments, Single Port Access Surgery is beginning to find its position in gynecological procedures.

At KK Women's & Children's Hospital, Singapore, Single Port Access Surgery was introduced in September 2009. As we were the first in Singapore to perform such procedures, we would like to present our initial experience in Single Port Access Surgery. A discussion on the suitable indications, technique and teething problems of this new surgical technique will be presented.

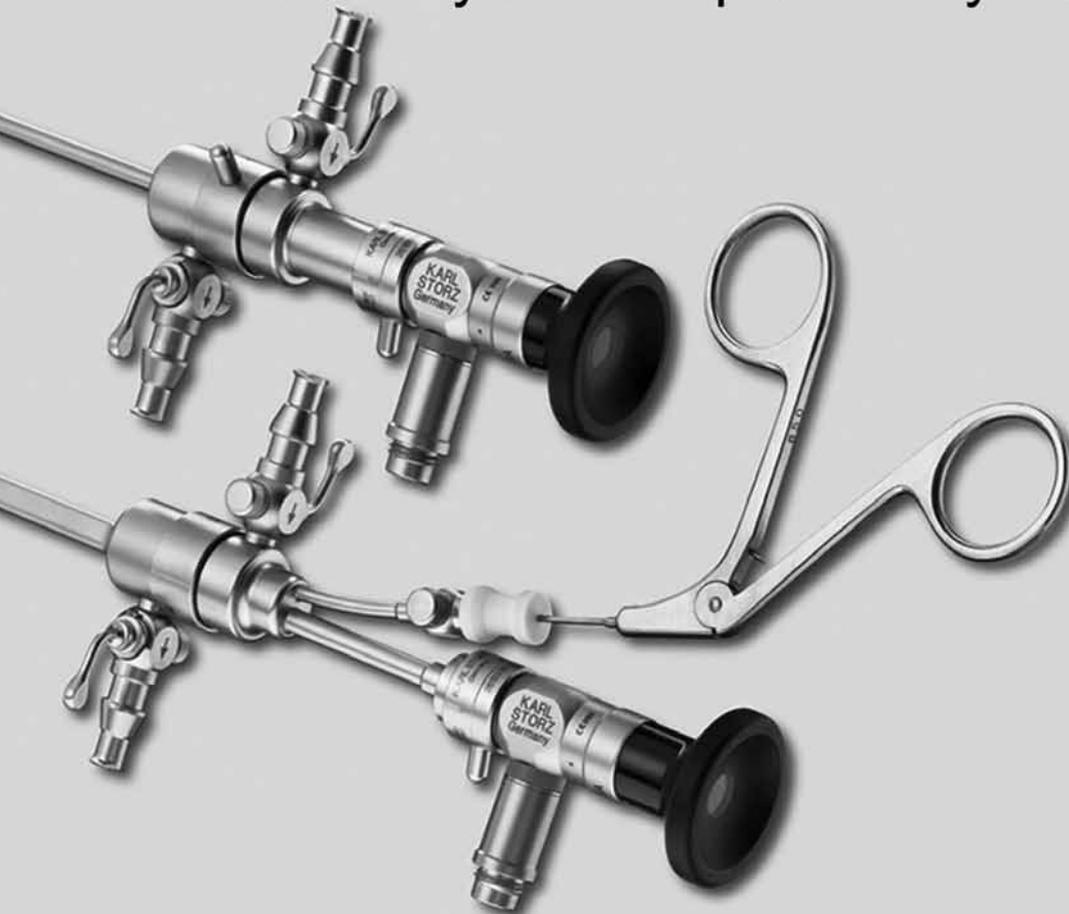
MATERIALS/METHOD: Prospective case series of the first 14 cases of Single Port Access Surgery in Singapore. These comprised of 5 cases of ectopic pregnancies, 3 cases of adnexectomy and 6 cases of total laparoscopic hysterectomy.

RESULTS: Single Port Access Surgery was successful in all cases without intra-operative complications or conversion to laparotomy. Mean operation time for all cases was 102.7mins (range 61-160mins) while the mean operation time for hysterectomy cases was 137.2mins (range 114-160mins). Two cases needed insertion of one additional port to complete the procedure. There was one case of vault hematoma presented at fourth day post hysterectomy.

CONCLUSIONS: Single Port Access Surgery is feasible for selected patients and appears to be comparable to conventional laparoscopy in terms of surgical outcome.

AUTHOR AFFILIATION: A. Siow; KK Women's & Children's Hospital, Singapore

BETTOCCHI Hysteroscopes for Hysteroscopy



STORZ
KARL STORZ – ENDOSKOPE
THE DIAMOND STANDARD

Free Communications Abstracts SESSION E

EFFECTS OF LAPAROSCOPIC TREATMENT OF ENDOMETRIOSIS ON QUALITY OF LIFE USING THE ENDOMETRIOSIS HEALTH PROFILE QUESTIONNAIRE (EHP 30)

FRIDAY 28 MAY / FREE COMMUNICATIONS E
ENDOMETRIOSIS II / 1400-1409

Kew C, Lam A

INTRODUCTION: Endometriosis is a common condition and prevalence may be as high as 10%.¹ The symptoms typically associated with endometriosis – chronic pelvic pain, dysmenorrhoea, dyschezia, dyspareunia and subfertility – can have a negative impact upon psycho-social parameters² and lead to a significant reduction in health-related quality of life (HRQoL)³

The EHP 30 questionnaire has been found to be an effective tool in evaluating the the quality of life in patients with endometriosis⁴. Its quality and reliability been tested⁵ and it had been validated⁶.

However there is no report on the EHP30 to evaluate the effect of surgical intervention on quality of life in patients with endometriosis. Other questionnaires (EuroQOL, SF12) have been used previously but they were not disease-specific in evaluating patients with endometriosis.

This study aims to utilize the EHP 30 to evaluate the effect of surgical treatment on quality of life in patients with endometriosis.

MATERIALS/METHOD: This is a prospective study. Women presenting to our centre and assessed clinically to likely have endometriosis were given EHP 30 questionnaires to complete. Patients who had surgical treatment subsequently and confirmed to have endometriosis at laparoscopy, were asked to complete the same questionnaire post-operatively. Pre-operative and post-operative scores were compared using the paired t-test to determine statistical difference in scores.

RESULTS: Data of EHP 30 by 47 women were collected pre and post-operatively from August 2006 to October 2009. Average age was 32 (range 19 to 47 years, SD 6.4 years). Majority were married or cohabiting (74.5%), approximately one-quarter were single (23.4%) and one woman was separated (2.1%). At preoperative survey, three-quarters of women had no children (74.5%), 12.8% had one child, 10.6% two children and 2.1% three children. The first follow-up surveys occurred on average 16 weeks post operatively (range 2 to 112 weeks, SD 23.6 weeks).

Statistical significance was found comparing pre and postoperative scores in the following areas: pain, feeling of control and powerlessness, emotions, social support, feelings about the medical profession and the treatment they have been receiving.

CONCLUSIONS: Our study shows surgical treatment has a positive effect on several areas of the EHP 30 which measures quality of life in patients with endometriosis.

REFERENCES:

1. Olive DL and Schwartz LB. (1993) Endometriosis. *N Engl J Med* 328:1759 – 1769.
2. Low WY and Edelman RJ. (1990) Psychosocial aspects of endometriosis: a review. *J Psychosom Obstet Gynaecol* 12:3 – 12.
3. Jones G, Kennedy S, Jenkinson C. (2002) Health-related quality of life

measurement in women with common benign gynecological conditions: a systematic review. *Am J Obstet Gynecol* 187:501 – 511.)

4. Evaluating the responsiveness of the Endometriosis Health Profile Questionnaire: the EHP-30. Jones G, Jenkinson C, Kennedy S. *Qual Life Res.* 2004 Apr;13(3):705-13.)
5. Measuring quality of life in women with endometriosis: tests of data quality, score reliability, response rate and scaling assumptions of the Endometriosis Health Profile Questionnaire. Jones G, Jenkinson C, Taylor N, Mills A, Kennedy S. *Hum Reprod.* 2006 Oct;21(10):2686-93. Epub 2006 Jul 4.)
6. Evaluation of the American version of the 30-item Endometriosis Health Profile (EHP-30). Jenkinson C, Kennedy S, Jones G. *Qual Life Res.* 2008 Nov;17(9):1147-52. Epub 2008 Oct 10.

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CORRELATION BETWEEN SYMPTOMS AND ANATOMICAL LOCATIONS OF ENDOMETRIOSIS AT LAPAROSCOPY

FRIDAY 28 MAY / FREE COMMUNICATIONS E
ENDOMETRIOSIS II / 1409-1418

Bignardi T, Kew C, Khong S-Y, Luscombe G, Lam A

OBJECTIVE: To correlate specific symptoms with the anatomical distribution of endometriosis at laparoscopy.

MATERIAL AND METHODS: Retrospective data analysis. We recorded symptoms and anatomical locations of endometriosis in 466 women who had laparoscopy in our tertiary referral centre. We studied the incidence of symptoms including dysmenorrhoea, non-cyclic pelvic pain (i.e left or right iliac fossa (IF) pain, lower abdominal pain, lower back pain), dyspareunia, dyschezia, constipation and menorrhagia, in relation to population characteristics and location of endometriosis at laparoscopy. Pearson's chi-square analysis or Fisher's Exact Test were used for comparison of categorical data.

RESULTS: Comparing women with and without symptoms, women with menorrhagia were significantly older, whilst women with dysmenorrhoea, left +/-or right IF pain and dyschezia were significantly younger. Dyspareunia and constipation were significantly associated with increased likelihood of infertility, left or right IF pain and lower abdominal pain with a decreased likelihood. We found a strong association between dysmenorrhoea and bowel symptoms (dyspareunia, dyschezia, constipation) and endometriosis of the bowel (p=0.001, p<0.001, and p=0.029). Dyschezia was also associated with obliteration of the POD (p=0.001). Dysmenorrhoea was significantly associated with both bowel endometriosis and endometriosis of the anterior compartment (p=0.025, p=0.002). Dyspareunia and unilateral pain (left or right IF pain) were associated with endometriosis of the utero-sacral ligaments (p=0.018, p=0.024). Lower abdominal pain and lower back pain were not associated with any specific location of endometriosis.

CONCLUSIONS: The type of pelvic pain often reflects the anatomical distribution of endometriosis, dyschezia and dyspareunia being the most site-specific symptoms.

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Free Communications Abstracts SESSION E

DOUBLE TROUBLE: A CASE OF ENDOMETRIOSIS IN PATIENT WITH UTERUS DIDELPHYSFRIDAY 28 MAY / FREE COMMUNICATIONS E
ENDOMETRIOSIS II / 1418-1427

Wang L, Amir M, Tsaltas J

INTRODUCTION: Uterus didelphys is a congenital abnormality that occurs in 5% of all Müllerian duct anomalies. It is classified as Type IV Müllerian anomaly by the American Fertility Society Classification. They commonly present with obstructive anomalies, pelvic pain (especially when it's progressive in nature), endometriosis, repetitive pregnancy loss, and repetitive adverse obstetrical outcomes.

We present a case of a 26 year old with uterus didelphys associated with double ureter on left side, who has a history of endometriosis. We show an endometriotic nodule evident in the midline in between the bladder and rectum, in between the twin uteri, and our technique of removing this nodule.

AUTHOR AFFILIATION: L. Wang, M. Amir, J. Tsaltas; Monash Medical Centre, Melbourne, Victoria, Australia

CAN WE PREDICT POSTERIOR COMPARTMENT DEEP INFILTRATIVE ENDOMETRIOSIS (DIE) USING SONOVAGINOGRAPHY IN WOMEN UNDERGOING LAPAROSCOPY FOR CHRONIC PELVIC PAIN?FRIDAY 28 MAY / FREE COMMUNICATIONS E
ENDOMETRIOSIS II / 1427-1436

Reid S, Bignardi T, Alhamdan D, Reid G, Condous G

INTRODUCTION: To date, several ultrasound imaging techniques have been used to predict the likely hood of endometriosis at laparoscopy. These include transvaginal ultrasound, transrectal ultrasound, and more recently, sonovaginography (SVG) ¹. Although 5-10% of women with endometriosis will have bowel involvement, currently it is very difficult to predict this group pre-operatively.² This group of women requires both gynaecological and colo-rectal input at surgery. To date, there is a lack of reproducible accurate pre-operative assessment for rectovaginal disease during ultrasound. The aim of this study is to use sonovaginography (SVG) to predict posterior compartment deep infiltrative endometriosis (DIE) in women undergoing laparoscopy for chronic pelvic pain.

MATERIALS/METHOD: This is a continuing, prospective observational study, which began in June 2009. All women included in this study were of reproductive age, had history of chronic pelvic pain, and had a plan for laparoscopic endometriosis surgery. A history was obtained and an ultrasonographic evaluation with Sonovaginography was performed on all women prior to laparoscopy. During SVG, a transvaginal (TV) ultrasound was performed with the introduction of gel into the posterior fornix of the vagina. The gel created an acoustic window between the TV probe and the surrounding structures of the vagina, allowing for visualization of the posterior compartment. SVG was then used to predict posterior compartment DIE. Women underwent laparoscopic surgery for diagnosis and, if necessary, surgical treatment of endometriosis. The correlation between SVG findings and laparoscopic findings was then analysed to assess the ability of SVG to predict posterior compartment deep infiltrative endometriosis.

RESULTS: To date, complete SVG and laparoscopic data was available for 21 women who underwent SVG, followed by laparoscopy. The sensitivity and specificity for SVG in the prediction of posterior compartment deep infiltrative endometriosis, as defined as rectovaginal, retrocervical and rectosigmoid nodules, was 80% and 100%, respectively. The PPV and NPV were 100% and 94%, respectively. When SVG was used to predict DIE in both midline (i.e. rectovaginal, retrocervical and rectosigmoid nodules) and lateral regions (i.e. uterosacral ligaments) the sensitivity and specificity were 45% and 100% respectively. The PPV and NPV were 100% and 63%, respectively.

CONCLUSIONS: SVG appears to be more effective in predicting DIE in the midline posterior compartment (i.e. rectovaginal, retrocervical, and rectosigmoid locations) in comparison to lateral DIE (i.e. uterosacral regions). SVG provides additional diagnostic information to conventional pelvic sonography, which may allow for the planning of specific endometriosis surgery and the need for colorectal input. SVG in the absence of a nodule has a high negative predictive value for the absence of midline rectovaginal disease.

REFERENCES:

1. Dessole S, Farina M, Rubattu G, Cosmi E, Ambrosini G, Nardelli G. Sonovaginography is a new technique for assessing rectovaginal endometriosis. *Fertil Steril* 2003;79:1023-1027.
2. Delpy R, Barthet M, Gasmi M, Berdah S, Shojai R, Desjeux A, Boubli L, Grimaud JC. Value of endorectal ultrasonography for diagnosing rectovaginal septal endometriosis infiltrating the rectum. *Endoscopy* 2005;37:357-361.

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IMPLEMENTATION OF A WEB-BASED PAIN DIARY FOR ENDOMETRIOSIS PATIENTS, "HERDIARY": AN EXPLORATORY STUDYFRIDAY 28 MAY / FREE COMMUNICATIONS E
ENDOMETRIOSIS II / 1436-1445

Khazali S, Loudon K, Moors A, Ballard K

INTRODUCTION: Accurate measures of patients' experiences of pain are difficult to capture, with most instruments tending to rely on a 'snap-shot' view. Better measures of pain are needed to help women communicate their symptoms, and to increase the validity of research outcome measures.

MATERIALS/METHOD/RESULTS: We share our experience in implementing a new online pain diary we have designed, entitled 'Herdiary', and we explore the potential benefits of this instrument in patients with chronic pelvic pain; both in clinical practice and in research. Within 'Herdiary', patients record their pain using visual analogue scale (VAS) from 0-10 on a daily basis, along with other information about their menstruation, time off from work or social activities. They also have the option to add comments for each pain score they provide. The software then creates a chart, which can be viewed by the patient and the clinician, indicating the severity and cyclicity of the pain. It also produces some descriptive statistics, including average pain score before and after any intervention.

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CONCLUSIONS: Given the variable nature of pain, daily pain measurement should provide a more representative reading of the pain pattern and severity. This not only provides a potentially better research tool but also, by actively involving patients in their care may be beneficial in achieving better pain control and improving patient satisfaction.

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DEEP BLADDER ENDOMETRIOSIS-SURGICAL TREATMENT

FRIDAY 28 MAY / FREE COMMUNICATIONS E
ENDOMETRIOSIS II / 1445-1454

Amir M, Tsaltas J, Donnellan S, Chan Y, Tan J

INTRODUCTION: Endometriosis involving the urinary tract occurs in approximately 1%-2% of all endometriosis cases. The bladder is the most frequent location and affects about 80% of these patients. The treatment approach to deep bladder endometriosis is surgical, laparoscopic or transurethral resection with varying recurrence rate.

MATERIALS/METHOD: In this presentation we show a summary of the largest series of bladder endometriosis treated surgically, laparoscopic or transurethral resection, and recurrence rate.

We will show our experience – review of cases and videos, and summarise with the current acceptable recommendations for treating bladder endometriosis.

REFERENCES:

1. Surgery for bladder endometriosis: long-term results and concomitant management of associated posterior deep lesions. Chapron C, et al. Hum Reprod. 2010 Feb 3.
2. Surgical approach to urinary endometriosis: experience on 28 cases. Antonelli A, et al. Arch Ital Urol Androl. 2006 Mar;78(1):35-8.

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A LONG TERM PROSPECTIVE OBSERVATIONAL STUDY OF THE IMPACT OF RADICAL LAPAROSCOPIC EXCISION OF SEVERE ENDOMETRIOSIS ON PAIN AND QUALITY OF LIFE PARAMETERS

FRIDAY 28 MAY / FREE COMMUNICATIONS E
ENDOMETRIOSIS II / 1454-1503

Majumder K, Hart R, Karthigasu K, McElhinney B, Burke C, Meninger I

INTRODUCTION: The objective of this study was to assess the impact of radical surgical excision of severe endometriosis on pain scores and quality of life parameters.

MATERIALS/METHOD: This is a prospective observational study of women with severe endometriosis undergoing radical surgical excision at a tertiary referral centre. Patients were recruited prospectively between January 2004 and January 2008. Baseline pre-operative assessment of pain scores for dysmenorrhoea, dyspareunia, non-menstrual pelvic pain and dyschezia was done by means of the visual analogue scale (VAS). Pre-operatively, quality of life data was measured by the short form (SF-12), EuroQoL (EQ5), sexual activity questionnaires and the health score. The extent of disease was documented and scored using the modified American Society of Reproductive Medicine (ASRM) scoring system. Photographs and treatment details were recorded. Pain and quality of life scores were repeated post-operatively.

RESULTS: 102 women consented to take part in the study and 88 (86.2%) women returned the pre-treatment and post treatment questionnaires and were included in this study. Long term follow up (2 years or more) was possible for 75% of the women included in the study.

Dysmenorrhoea interfering with usual activities was present in 92.5% of women pre-operatively. Over 50% of women had associated symptoms such as dyspareunia, dyschezia and non-menstrual pain. 30% of women had sub-fertility of greater than 12 months duration.

The median time to completion of the first post-operative assessments was 6 months (range 2-13 months). Improvement in median visual analogue scale scores was noted for all pain types assessed (range 1.5 – 4.0). Substantial improvement was noted for dyschezia (4.0 points) and dysmenorrhoea (3.5 points). There was an improvement in median quality of life scores across all areas tested, as well as health scores. Long term outcomes such as successful pregnancy, recurrence of symptoms and subsequent surgery were recorded and results will be available shortly.

CONCLUSIONS: Our results show a significant improvement in the visual analogue pain scores and quality of life scores supporting radical surgical excision of severe endometriosis. The long term impact of surgery and the results regarding disease recurrence are being analyzed and will be available shortly.

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IS POUCH OF DOUGLAS (POD) OBLITERATION A MARKER OF BOWEL ENDOMETRIOSIS?

FRIDAY 28 MAY / FREE COMMUNICATIONS E
ENDOMETRIOSIS II / 1503-1212

Khong S-Y, Bignardi T, Lam A, Luscombe G

OBJECTIVE: To assess predictive value of POD obliteration in the diagnosis of bowel endometriosis.

DESIGN: A prospective study between October 2004 and September 2008.

SETTING: University-affiliated tertiary referral centre for endometriosis.

PATIENTS: 454 consecutive women who underwent laparoscopic surgery for treatment of pelvic pain and/ or infertility-associated endometriosis

INTERVENTION: Logistic regression analyses were performed to

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investigate the predictive value of POD obliteration at laparoscopy in regards to bowel endometriosis.

RESULTS: 22% (101/454) of our sample population were found to have obliteration of the POD. Of these, 54.5% (55/101) required bowel shaving, wedge or full segmental bowel resection or a combination of bowel procedures. All had histological confirmation of bowel endometriosis. Of the remaining 46 women, 90.2% had endometriosis confirmed elsewhere in the pelvis.

CONCLUSION: Obliteration Pouch of Douglas is a strong predictor of bowel endometriosis ($p < 0.001$). Surgery in these cases are highly challenging with significant associated risks therefore clinicians may consider referring these patients to a dedicated endometriosis centre with multidisciplinary expertise for further management.

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ENDOMETRIAL OSSEOUS METAPLASIA: 2 CASES OF A RARE DIAGNOSIS

FRIDAY 28 MAY / FREE COMMUNICATIONS E
ENDOMETRIOSIS II / 1512-1521

Jagasia N

Osseous metaplasia of the endometrium is a rare and often misdiagnosed condition, occurring in approximately 0.3 per 1000 women.

In this review we present two cases of this uncommon entity as well as a review of literature on our current understanding of the possible causes and treatment of endometrial osseous metaplasia.

Both presented cases highlight some of the most common clinical presentations of endometrial osseous metaplasia including secondary infertility / sub fertility; the bony fragments causing infertility by acting like intra-uterine synechia or an intra-uterine device. Other symptoms include menstrual irregularity, vaginal discharge, pelvic pain and dysmenorrhoea.

The characteristic ultrasonographic appearance of a densely echogenic band occupying the endometrial cavity is demonstrated. In the cases presented, hysteroscopic examination confirms the presence of bony spicules within the uterine cavity which are able to be removed with grasping forceps via an operative hysteroscope. The macroscopic and microscopic histological features of this condition are described.

Several reports of endometrial ossification have appeared in the literature in recent decades but the exact aetiology of this condition remains controversial. Although metaplasia of mature stromal cells of the endometrium or heteroplasia of embryonally displaced mesodermal cell nests to form cartilage or bone has been suggested, others have reported retained fetal tissue after an abortion as a plausible cause.

A history of abortion, spontaneous or therapeutic, is the hallmark of this condition. Proposed theories include the retention of fetal bones within the uterus after second trimester abortion, dystrophic calcification of retained fetal tissue and the presence of totipotent cells in the endometrium with the capacity to transform into bone or cartilaginous tissue in response to chronic inflammation (e.g. chronic endometritis) or trauma from recurrent abortions. Metabolic causes such as hypervitaminosis D, hypercalcemia and prolonged oestrogen stimulation of the endometrium have also been discussed in literature as possible causes.

Recent studies in women with a history of previous abortion, utilizing DNA analysis techniques to compare the DNA from a woman with that of the bone fragments evacuated from her uterus, suggest that the bone is not of fetal origin but has the same genetic origin as the patient. The absence of surrounding tissue reaction (to the bony elements) and endochondral ossification may further help differentiate true osseous metaplasia from calcified retained fetal tissue. Notwithstanding the above controversies the optimum method of treatment of osseous metaplasia seems to be by hysteroscopic resection (mechanical or with electrocautery), with or without ultrasound guidance.

REFERENCES:

1. Parente R, Partriarca M, Soares de Moura Neto R et al. Genetic Analysis of the Cause of Endometrial Osseous Metaplasia. *Obstetrics and Gynecology*; Vol 114 No 5 (1103-1108)
2. Elford K, Claman P. Novel treatment of a patient with secondary infertility due to retained fetal bone. *Fertility and Sterility*; Vol 79 No 4 (1028-1030)
3. Lainas T, Zorzovilis I, Petsas G et al. Osseous Metaplasia: case report and review. *Fertility and Sterility*; Vol 82 No 5 (1433-1435)
4. Bahceci M, Cem Demirel L. Osseous metaplasia of the endometrium: a rare cause of infertility and its hysteroscopic management. *Human Reproduction*; Vol 11 No 11 (2537-2539)

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LOWER URINARY TRACT AND BOWEL DYSFUNCTION FOLLOWING RADICAL ENDOMETRIOSIS RESECTION

FRIDAY 28 MAY / FREE COMMUNICATIONS E
ENDOMETRIOSIS II / 1521-1530

Krishnan S, De Vries B, Cooper M, Li Y

The mainstay treatment for severe endometriosis has always been resection of all visible disease to improve symptoms, normalise anatomy and improve fertility. Current practice for the excision of endometriosis includes excising parasympathetic and sympathetic nerve plexuses within the utero-cardinal complex which is integral for bladder and bowel function. There is minimal published data which examines the potential bowel or bladder denervation and dysfunction following excision of advance pelvic endometriosis.

Neuro-functional and Nerve-sparing surgical techniques have been recognised in multiple surgical specialties. With respect to gynaecological surgery, "nerve sparing" radical hysterectomy for cervical cancer and preservation of the hypogastric plexus of nerves are frequently considered. These studies have shown that nerve-sparing techniques in the context of cervical cancer has led to a reduced rate of urinary complications.

We conducted an ethics approved pilot study utilising a well-validated questionnaire in order to demonstrate lower urinary tract and bowel dysfunction following radical endometriosis surgery (AFS 4). Our hypothesis is that patients who have had deep infiltrating endometriosis involving the utero-cardinal ligament complex will, subsequent to resection suffer from a degree of bowel or bladder dysfunction. Resection of deep endometriotic nodules within the pelvis, and despite its bilaterality will denervate neural pathways which within it comprises of both the parasympathetic and sympathetic nerve plexuses responsible for bowel and bladder control.

The result of our pilot study will be discussed, and we do argue that there may be a role of nerve sparing radical endometriosis surgery and standardisation of its techniques.

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Free Communications Abstracts SESSION F

CHLAMYDIA TRACHOMATIS IN FALLOPIAN TUBES OF WOMEN UNDERGOING LAPAROSCOPY FOR ECTOPIC PREGNANCY

FRIDAY 28 MAY / FREE COMMUNICATIONS F
HYSTERECTOMY / ECTOPIC PREGNANCY
1400-1409

Alhamdan D, Bignardi T, Mongelli M, Casikar I, Reimke J, Branley J

INTRODUCTION: Chlamydia trachomatis is common among young and sexually active people. Most often infections are asymptomatic but have potential long-term consequences for the reproductive health. The pathogenesis of tubal ectopic pregnancy (EP) in the context of Chlamydia trachomatis infection is poorly understood. We aimed to study whether Chlamydia trachomatis is absent or persists in a latent state in the fallopian tube at the time of laparoscopy for tubal EP.

MATERIALS/METHOD: We examined tissue of the fallopian tubes for the presence of Chlamydia trachomatis from women who underwent laparoscopic salpingectomy for EP.

RESULTS: Fresh tubal tissue from 16 women with histological confirmation of EP were examined in a hospital setting for the presence of Chlamydia trachomatis. The presence of Chlamydia trachomatis DNA was confirmed by polymerase chain reaction (PCR) using a commercial test (BD ProbeTec™ ET System) and a real-time enhanced PCR able to detect few copies of the organism. Chlamydial DNA was detected in 0 of the 15 tubal specimens. In 1 case the PCR analysis was not possible for presence of inhibitors.

CONCLUSIONS: We did not find any evidence of latent infection of Chlamydia trachomatis in the fallopian tube at the time of laparoscopy for EP in our study. This suggests that EP can be considered a late complication of the tubal damage resulted from a previous acute Chlamydia infection, and that EP may not be related to a latent persistence of Chlamydia in the fallopian tube.

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SELECTED USE OF URETERAL CATHETER IN ANTICIPATED DIFFICULT LAPAROSCOPIC SURGERY: A RETROSPECTIVE ANALYSIS

FRIDAY 28 MAY / FREE COMMUNICATIONS F
HYSTERECTOMY / ECTOPIC PREGNANCY
1409-1418

Angstetra D, Chang T

INTRODUCTION: The majority of ureteric injury occurs during gynaecological surgery, but only, less than one-third are recognised intraoperatively. Predisposing factors including distorted pelvic anatomy (adhesion/ectopic pregnancy), obliteration of normal tissue planes, difficult to access or visualise due to bleeding or obesity, and dissection in close proximity to the ureter.

There is some evidence that routine prophylactic ureteral catheterisation for all gynaecological surgery does not reduce the rate of ureteric injury, however there is no good quality evidence regarding the use of ureteral catheter in selected cases of anticipated or actual difficult laparoscopic gynaecological surgery.

We report our experience using ureteric catheters and conducted retrospective analysis to evaluate the usefulness of ureteral catheters in selected high risk laparoscopic gynaecological cases.

MATERIALS/METHOD: A retrospective study over 9 years period was performed to identify cases of women who underwent complex laparoscopic surgery and whose management required insertion of ureteric catheter(s) at Campbelltown Public Hospital and Campbelltown Private Hospital. Data collections were acquired through a review of clinical records with a specially designed data collection form.

The decision to place ureteral catheters is based primarily on the surgeon's subjective view of the anticipated difficulty of a particular case. These women were considered at high risk for ureteral injury based on extends of the surgery itself or previous medical or surgical history that could increase the technical difficult of the operation.

RESULTS: During the study period between 2001 and 2010, there were 61 women underwent a variety of gynaecological procedures requiring insertion of ureteral catheters. 2 cases were excluded because of laparotomy and 2 initial planned laparoscopic cases but converted to laparotomy.

51(89.5%) and 6(10.5%) women had the ureteric catheter(s) inserted preoperatively and intraoperatively. No ureteric injuries were identified intraoperatively or postoperatively.

No women experience symptoms such as loin pain or anuria to suggest transient ureteric obstruction from spasm or oedema. There is various degree of transient haematuria occurred in some patients postoperatively.

CONCLUSIONS: Ureteral catheter is safe and simple to insert. It helps avoiding ureteral injury during complex laparoscopic procedure as it enhances ureteric identification and facilitates ureteric dissection. The procedure itself is easily mastered and causes no major complications. We believe that ureteral catheter has a role in selected use for high-risk cases.

REFERENCES

1. Tanaka Y, Asada H, Kuji N, Yoshimura Y. Ureteral catheter placement for prevention of ureteral injury during laparoscopic hysterectomy. *J Obstet Gynaecol Res* 2008; 34(1):67-72.
2. Ostrzenski A, Radolinski B, Ostrzenska KM. A review of laparoscopic ureteral injury in pelvic surgery. *Obstet Gynecol Surv* 2003; 58(12):794-799.
3. Chou MT, Wang CJ, Lien RC. Prophylactic ureteral catheterisation in gynaecologic surgery: A 12-year randomised trial in a community hospital. *Int Urogynecol J* 2009; 20:689-693.
4. Wood EC, Maher P, Pelosi MA. Routine Use of Ureteric Catheters at Laparoscopic Hysterectomy May Cause Unnecessary Complications. *J Am Assoc Gynecol Laparosc* 1996; 3(3):393-397.
5. Quinlan DJ, Townsend DE, Johnson GH. Are ureteral catheters in gynecologic surgery beneficial or hazardous? *J Am Assoc Gynecol Laparosc*. 1995; 3(1):61-5.
6. Le'onard F, Fotso A, Berghese B, Chopin N, Foulot H, Chapron C. Ureteral complications from laparoscopic hysterectomy indicated for benign uterine pathologies: A 13-year experience in a continuous series of 1300 patients. *Hum Reprod* 2007; 22(7):2006-2011.

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Free Communications Abstracts SESSION F

TOTAL LAPAROSCOPIC HYSTERECTOMY – THE MAGIC OF CONVENTIONAL BI-POLAR & UNIPOLAR

FRIDAY 28 MAY / FREE COMMUNICATIONS F
HYSTERECTOMY / ECTOPIC PREGNANCY
1418-1427

Brahmbhatt S

OBJECTIVE: To evaluate the efficacy and safety of Bipolar and Monopolar as an energy source for TLH.

DESIGN: This is a study done on 1000 cases of TLH done over the time period of four years.

SETTINGS: All the surgeries were done in Jayna Women's Hospital and Hospitals surrounding our area.

PATIENTS: All the patients were among the age group from 35 to 65 years.

OUT COME MEASUREMENTS:

- Post operative period.
- Amount of Intraoperative blood loss.
- The duration of hospital stay.
- Complications Related to bowel, bladder, ureters, port infection, infection, secondary hemorrhage, vault bleeding.
- Cost effectiveness.

RESULTS:

- Postoperative periods were painless and without any morbidity in patients who underwent TLH.
- The average duration of hospitalization was reduced up to 48 hours.
- There was no need for parental antibiotics for more than two shots.
- Not a single patient developed bowel injury or Ureteral injury.
- 5 out of 1000 patients were having bladder injury during surgery which were noticed and repaired at the same time by laparoscopy.
- All the 5 patients who were having intra operative bladder injuries were having previous history of LSCS.
- 1 out of 1000 patients developed VVF after TLH which was repaired after 3 months.
- TLH can be done in any size of uterus.
- The average time for surgery was 60 minutes.
- The average blood loss during surgery was 15-20 cc.
- TLH is a better option for those patients who were having history of previous surgery, associated ovarian pathology or tubal pathology.
- Bipolar and Monopolar are equally effective and safe as compared to vessel sealing devise or ultrasonic scissor like harmonic scalpel.
- TLH by Bipolar and Monopolar is extremely cost effective and safe and it's a boon in developing countries like INDIA where an average person can not afford for Laparoscopic surgery.
- If a surgeon follows the anatomy and maintains bloodless field during TLH Bipolar and Monopolar are the best for TLH.
- It is the Man behind the machine who is more important than any other technology.

AUTHOR AFFILIATION: Dr.Sanjay Brahmbhatt; Jayna Women's Hospital, Anand, Gujarat, India

HYBRID NOTES HYSTERECTOMY – DYNAMIC TRANSVAGINAL LAPAROSCOPY

FRIDAY 28 MAY / FREE COMMUNICATIONS F
HYSTERECTOMY / ECTOPIC PREGNANCY
1427-1436

Andou M

INTRODUCTION: The desire for the leastminimally invasive techniques prompted surgeons to seek a transluminal endoscopic surgery- in other words NOTES. However, due to immaturity of instruments and the limitations caused by the complexity of procedure, it has not become widely accepted. As a result we developed a hybrid NOTES technique using trans-vaginal laparoscopy combined withminimal abdominal access, a much more practical approach than pure NOTES.

MATERIALS/METHOD: 2 small ports (5mm umbilical trocar and 3mm left lower quadrant trocar) were placed. A 5mm distal-chip flexible videoendoscope was introduced into the vaginal-port and flexed 180 degrees. The original camera image is reversed so an image converter was used to obtain an image similar to umbilical laparoscopy. The adnexal ligament, tube and round ligament and then cardinal ligament are transected the same as in standard laparoscopy. The cardinal ligament is doubly suture-ligated and transected between these sutures. A circumferential vaginal incision was made with the assistance of our original vaginal pipe. After the specimen was retrieved transvaginally the vaginal pipe was introduced again and the transvaginal laparoscope was fed through the vaginal pipe and once again flexed 180 degrees. Under this vision the vagina was closed via intracorporeal suturing with the two abdominal ports as working ports.

RESULTS: No complications were recorded. All patients resumed a regular diet the day after surgery.

CONCLUSIONS: Hysterectomy is the cornerstone of gynecologic surgery and is traditionally performed vaginally or abdominally. The vaginal approach is considered the least invasive but has limitations. The laparoscopic four-puncture technique increases applicability but also the number of wounds. To reduce the size and number of ports we developed a minimal abdominal access hysterectomy using transvaginal laparoscopy. Hybrid NOTES hysterectomy is a new option for patients who desire an almost scar-less procedure.

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REMOVAL OF UTERI DURING TOTAL LAPAROSCOPIC HYSTERECTOMY

FRIDAY 28 MAY / FREE COMMUNICATIONS F
HYSTERECTOMY / ECTOPIC PREGNANCY
1436-1445

Hashimoto Y, Matsumoto T, Kuramori R, Chein HW, Akashi Y, Oku H, Saeki A, Ikuma K

BACKGROUND: Total laparoscopic hysterectomy (TLH) is an operation in

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which all procedures are performed laparoscopically, except for removal of uterus. The removal of large uteri may lead to prolong operating time. Therefore, in our hospital three methods are used to remove uterus efficiently during TLH. The first method is to extrude the uteri that was morcellating through vagina (group 1, n=136). The second is to remove vaginally after laparoscopic enucleation of fibroids completely or incompletely in patients with fibroids (group 2, n=85). The third is to morcellate the uteri laparoscopically with a mechanical morcellator (group 3, n=84). We compared the uterine weights and the times for removal in these three methods.

PATIENTS: Three hundreds five women who underwent TLH due to fibroids or adenomyosis in our hospital from January 2007 to December 2009.

RESULTS: The mean weights of uterus were 288g (group 1), 338g (group 2), 595g (group 3), respectively. Forty six patients belonged to group 3 in 82 patients who had uteri of more than 500g. The median time of removal per uterine weights $2.16 \pm 3.77, 2.40 \pm 0.69$ for groups 2, 3, respectively were significantly shorter in patients of groups 2 than group 3.

CONCLUSION: Our results showed that trans-vaginal extraction of uterus after laparoscopic enucleation of fibroids is an efficient procedure for removal of uteri during TLH. It is important to select an appropriate method for cases.

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PURSESTRING SUTURE TECHNIQUE TO ENABLE LAPAROSCOPIC MANAGEMENT OF INTERSTITIAL ECTOPIC PREGNANCY

FRIDAY 28 MAY / FREE COMMUNICATIONS F
HYSTERECTOMY / ECTOPIC PREGNANCY
1445-1454

Aust T, O'Neill A, Chou D, Rosen D, Cario G

INTRODUCTION: The management of an interstitial ectopic pregnancy involves a number of decisions and technical challenges. When there is a concurrent intrauterine pregnancy the options for treatment are fewer. Our unit was recently referred a patient who was six weeks pregnant with vaginal spotting and mild right sided pelvic pain.

An ultrasound at that time showed a twin pregnancy with one of the twins intrauterine and one an ectopic in the interstitial portion of the right fallopian tube.

MATERIALS/METHOD: A 3/0 PDS suture on a curved needle was passed around the cornual part of the uterus proximal to the ectopic in a pursestring fashion. An extracorporeal modified Roeder slipknot¹ was then fashioned and tightened but not cut to allow further tightening as required. The Roeder knot was further tightened and the base coagulated to achieve haemostasis. Further 3/0 PDS sutures were used to close the serosal defect. The myometrium over the gestation sac was then coagulated and the cornual area excised. She made a good recovery and was discharged that day.

RESULTS: At eight weeks' gestation an ultrasound scan confirmed a viable singleton intrauterine pregnancy consistent with dates. Unfortunately, a scan at 12 weeks showed a non-viable fetus in the cervical canal and she underwent an evacuation of retained products of conception. To our knowledge this is the first time this technique has been reported.

CONCLUSIONS: An endoloop ready tied ligature has been described for management of interstitial ectopics but we feel that this has the disadvantage that it can slip off the cornual area as it is not embedded into the uterine wall. This is because the base of the resected cornual area forms a wide-based pedicle that the loop must contain.

As interstitial ectopic pregnancies still carry a risk of mortality or hysterectomy we still feel that our management was successful in that our patient had the chance to try to continue with her intrauterine pregnancy and still retains her reproductive potential for the future.

REFERENCES:

1. Sharp HT, Dorsey JH. The 4-S modification of the roeder knot: How to tie it. *Obstet Gynecol* 1997, Dec;90(6):1004-6.

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ESTIMATION OF UTERINE DRY WEIGHT FROM PRE-OPERATIVE 3-D UTERINE VOLUME ULTRASOUND EVALUATION IN WOMEN UNDERGOING TOTAL LAPAROSCOPIC HYSTERECTOMY (TLH)

FRIDAY 28 MAY / FREE COMMUNICATIONS F
HYSTERECTOMY / ECTOPIC PREGNANCY
1454-1503

Alhamdan D, Bignardi T, Reid S, Mongelli M, Chou D, Condous G

To derive a formula allowing the estimation of uterine dry weight from pre-operative 3-D uterine volume ultrasound evaluation in women undergoing TLH.

MATERIALS/METHOD: This is an ongoing prospective study on women undergoing TLH. Data collected includes patient age, parity, height, weight, 3-D ultrasound estimated uterine volume, operative blood loss and dry weight as measured by our pathology service. Volume data sets were analyzed using virtual organ computer-aided analysis (VOCAL) with regards to the uterine volume. The uterine volume was manually calculated with VOCAL in the longitudinal plane with 30 degrees rotation steps. A prediction model was developed using multiple regression analysis to predict uterine dry weight.

RESULTS: To date 27 cases of TLH were available for analysis. The mean age was 45.5 years (SD 6.4), the ultrasound estimated volumes ranged from 26.4mL to 1507mL. The correlation coefficient between ultrasound volumes and dry weight was 0.98. The weight estimation formula was: uterine weight (g) = 1.03 Uterine volume + 20.4 parity - 13.8. The 95% CI for prediction errors was - 218 g to 164 g.

CONCLUSIONS: Uterine weight can be estimated from pre-operative 3-D uterine volumetric data in women undergoing TLH with a fair degree of accuracy. This technology could be potentially used to predict to the need to morcellate in the future.

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RUPTURED ECTOPIC PREGNANCY AND ROUTINE LAPAROSCOPIC MANAGEMENT IN SHOCK... SHOCKING?

FRIDAY 28 MAY / FREE COMMUNICATIONS F
HYSTERECTOMY / ECTOPIC PREGNANCY
1503-1512

Vij P, Cherian TK

INTRODUCTION: 'Ruptured' or 'Un-Ruptured' ectopic pregnancy is successfully managed with more or less an accepted protocol i.e. the 'Un-Ruptured' ectopics managed with Methotrexate/ Actinomycin (or by Linear Salpingostomy if sized >3.5cms) and the 'Ruptured' with a Salpingectomy.

With the regular use of laparoscopy, clinicians (and patients) have preferred this for management of almost all presentations.

There is a progressive number of practitioners to use the laparoscopic approach to manage ruptured tubes with ectopic pregnancies, but there is wide un-acceptability of management of ruptured ectopic pregnancies presenting with "circulatory compromise/collapse" i.e. "clinical shock" ... where the preference is for a more conservative laparotomy. The latter is basically because of concerns regarding the viability of a laparoscopic procedure to successfully manage a ruptured tube within good time and with minimal morbidity to the patient.

METHOD: 90 cases of ruptured ectopic pregnancy were managed laparoscopically from April 2004 to March 2009. Of these 15 patients presented with >800ml hemoperitoneum or Clinical shock.

The issue regarding patients with shock is well addressed with clinical and timely usage of crystalloids and colloids, having a diligent residents, dedicated support staff and a well stocked blood bank... all of which cuts down ER to OR time.

Also, the time taken for setting up of laparoscopic surgery is no more than that taken for setting up a laparotomy.

CONCLUSION: We at St. Stephen's have regularly managed most ruptured ectopic pregnancies with laparoscopic procedures and we present a cohort of 90 Ruptured ectopic pregnancies out of which 15 have presented with clinical shock. The 15 pregnancies in clinical 'correctible' shock were all managed laparoscopically and the average hospital stay in these patients was 2.5 days. Significantly, there was no mortality.

RECOMMENDATION: In well equipped hospitals with trained laparoscopic consultants, there is a definite possibility of 'routine laparoscopic management of ruptured ectopic pregnancies' even in clinical (correctable) shock. There are reports of similar management in centers around the globe but this approach is still in its nascence.

REFERENCES:

1. M. I. Rizzuto, R. Oliver and F. Odejinmi; Laparoscopic management of ectopic pregnancy in the presence of a significant haemoperitoneum. Archives of Gynecology and Obstetrics; Volume 277, Number 5 / May, 2008: Page 433-436.

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CAN WE REDUCE THE NEED FOR LAPAROSCOPIC SURGERY IN WOMEN WITH AN ECTOPIC PREGNANCY? CONSERVATIVE MANAGEMENT OF ECTOPIC PREGNANCY: THE PRE-TREATMENT HUMAN CHORIONIC GONADOTROPHIN (HCG) RATIO

FRIDAY 28 MAY / FREE COMMUNICATIONS F
HYSTERECTOMY / ECTOPIC PREGNANCY
1512-1521

Alhamdan D, Bignardi T, Reid S, Reimke J, Casikar I, Lu C, Mongelli M, Condous G

We aimed to evaluate the use of the pre-treatment hCG ratio in the conservative treatment of tubal EPs.

MATERIALS/METHOD: Ongoing prospective observational study. All women who presented to the EPU between Nov 2006 and December 2009, with a TVS diagnosis of tubal EP were included in the analysis. EPs are managed in accordance to a strict protocol which includes a full evaluation of clinical, sonographic and biochemical (hCG) data. Surgery in the form of laparoscopic salpingectomy is performed only if: clinical presentation suggests rupture (severe abdominal pain, significant hemoperitoneum on scan, haemodynamic instability), non-compliance or failure of conservative treatment (MTX or expectant). In all other women the pre-treatment serum hCG ratio (hCG at 48hrs/hCG at presentation) is determined: if at 48h, the hCG ratio > 1.0 (evolving EP) women are treated with MTX in a single-dose i.m. protocol; if at 48 h, the hCG ratio < 1.0 (failing EP) women are offered expectant management with weekly serum hCG. Success was defined as an uneventful decline of the hCG to non-pregnancy levels with the primary intervention.

RESULTS: 2048 consecutive pregnant women underwent TVS. During the study period 106/2048 (5.2%) tubal EP were managed according to the unit's protocol. Median age (years) was 30 (Range 17-44), median gestational age (days) at diagnosis was 47 (Range 11-86), and median serum hCG level (IU/L) at presentation was 837 (Range 12-41440). 45 (42.5%) were treated surgically from the onset. 23 (21.7%) women had an hCG > 1.0 and therefore were selected for MTX whilst 38 (35.8%) women had an hCG ratio < 1.0 and therefore were selected for expectant management. Two women had laparoscopy as a failure of MTX and expectant management respectively. Success rates of MTX and expectant management were 87% and 95%, respectively.

CONCLUSIONS: Determination of pre-treatment hCG ratio in women with an EP who are clinically stable can optimise non-surgical interventions.

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INTRODUCING THE 'MAGNET METHOD' INTO GYNECOLOGICAL SINGLE PORT SURGERY

FRIDAY 28 MAY / FREE COMMUNICATIONS F
HYSTERECTOMY / ECTOPIC PREGNANCY
1521-1530

Takaki Y, Andou M

INTRODUCTION: SPS (single port surgery) is being applied to more and more complicated cases recently, however many problems have arisen from having only two forceps in restricted working space. As a result we came to desire additional independent forceps without further invasion. This prompted us to introduce a novel technique, the "magnet method". The "magnet method" is manipulating the metal forceps in the body with a magnet placed on the abdominal surface. This technique was reported for the first time by Dr Hayashi of Saku General Hospital's general surgeon group and is already known to be a useful technique to general surgeons. We modified it and introduced our modified version into our original procedure and found that it is also useful in gynecologic surgery. We will report these findings in our video presentation.

MATERIALS/METHOD: We applied the "magnet method" in a total laparoscopic hysterectomy case where the patient had fibroids. We used laparoscopic hemostatic forceps, a metal ring, and a strong magnet and linked them with threads despite the bull-dog shaped hemostatic forceps is used in the original method. The magnet used is a neodymium magnet which has amazing power (up to 160kg) and is available in any hardware shop.

RESULTS: The linked forceps that were inserted before placing the port were taken up again and loaded on the handle and then attached on the fallopian tube and pulled to the opposite side to the working area by the magnet placed on the abdominal surface. We were able to obtain a good view and appropriate traction forces with this simple method.

CONCLUSIONS: The magnet controlled forceps make it possible to regain the lost counter traction and good view which is essentially and necessary for a safe laparoscopic operation without any additional incisions. By this method we were able to enlarge the application of SPS while maintaining minimum invasion.

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BUBBLES IN THE UTERUS – A LIFE THREATENING SITUATION

FRIDAY 28 MAY / FREE COMMUNICATIONS G
COMPLICATIONS / 1400-1409

Kaur H

INTRODUCTION: Uterine clostridium perfringens (formally known as Clostridium welchii) with associated sepsis is extremely rare in women who have not had prior uterine manipulation. A recent case managed at the Royal Womens Hospital Melbourne will be discussed.

MATERIALS/METHOD: Case report and Medline English literature review.

RESULTS: 52 year old nullipara presented with a two day history of fever, PV bleeding, offensive vaginal discharge and severe abdominal pain on a BACKGROUND of multifibroid uterus (intramural fibroids measuring 14cm, 3.3cm and 2.2cm). She had never been sexually active and was commenced on Primolut by her GP for menorrhagia 3 months prior to her presentation. On examination, she was febrile 39C, normotensive and had a tender 34 week sized uterus with offensive, bloody PV discharge. Ultrasound suggested a complex ovarian mass with abnormal thickened endometrium and CA125=264. She was fluid resuscitated and commenced on IV antibiotics. Within 12 hours she developed coagulopathy, haematuria, jaundice and haemolytic anemia, despite treatment with IV ceftriaxone, gentamicin and metronidazole. High vaginal swabs showed gram positive bacilli and MRI showed a 25cm uterus with gas containing structures. After discussion with haematology, infectious disease and gynae-oncology, the working diagnosis was a probable uterine malignancy with secondary sepsis. Within 24 hours of her admission, she had an uncomplicated hysterectomy and bilateral salpingo-oophorectomy with peritoneal washings after stabilization with fluid resuscitation and blood products. Histopathology showed a 32cm uterus with a degenerative uterine fibroid, normal tubes, ovaries and peritoneal washings. Microbiology showed clostridium perfringens in the degenerative fibroid, uterine tissue, high vaginal swab and blood cultures. She became afebrile within 12 hours and had 7 days of IV penicillin. She was discharged home on day 8.

CONCLUSIONS: Clostridium perfringens is a gram positive anaerobic bacillus that produces exotoxins which cause tissue necrosis and haemolysis that can rapidly lead to multiorgan failure and death if left untreated in 50-70% cases¹.

According to a recent English literature search, there are only 2 other cases of C.perfringens sepsis complicating a degenerative uterine leiomyoma.^{2,3}

Reductions in mortality appear to rely on promptness in diagnosis, supportive care, broad spectrum antibiotics and surgical debridement. Penicillin is the drug of choice; however, recent data shows that combination antimicrobial therapy with penicillin and clindamycin or tetracycline may further reduce mortality through the reduction in toxin synthesis⁴.

Hysterectomy without surgical resection of the adnexal structures may be inadequate because of rapid C. perfringens involvement of extrauterine structures⁵. Hyperbaric oxygen (HBO) has been used to treat C. perfringens infections with varying efficacy and the role of HBO remains controversial.

In conclusion, this case illustrates the need for prompt recognition and treatment which is essential for improved survival.

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REFERENCES:

1. Smith LP, Mclean AP. "Clostridium welchii septotoxaemia", *Am J Obstet Gynecol* 1971;110:135-49.
2. B. M. Kaufmann, J. M. Cooper, and P. Cookson, "Clostridium perfringens septicemia complicating degenerating uterine leiomyomas," *American Journal of Obstetrics and Gynecology*, vol. 118, no. 6, pp. 877-878, 1974.
3. Bryant CS, Perry L, Shah JP, Kumar S, Deppe G, "Life threatening clostridial sepsis in a post-menopausal patient with degenerating uterine leiomyoma"
4. D. L. Stevens, K.A. Maier, B.M. Laine, and J.E. Mitten, "Comparison of clindamycin, rifampin, tetracycline, metronidazole, and penicillin for efficacy in prevention of experimental gas gangrene due to Clostridium perfringens," *J Infect Dis*, vol. 155, no. 2, pp. 220-228, 1987.
5. J. P. Barrett, J. L. Whiteside, and L. A. Boardman, "Fatal clostridial sepsis after spontaneous abortion," *Obstetrics and Gynecology*, vol. 99, no. 5, pp. 899-901, 2002.

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PRINCIPLES AND PRACTICAL APPLICATIONS OF ELECTROSURGERY IN LAPAROSCOPY

FRIDAY 28 MAY / FREE COMMUNICATIONS G
COMPLICATIONS / 1409-1418

Kingston AJ, Lyons SD, Abbott JA, Vancaillie TG

INTRODUCTION: Monopolar diathermy is a popular tool in both laparoscopic and open surgeries.

For example, monopolar electrosurgery was used in 85% of operative laparoscopies performed in the Northern Sydney Central Coast Area Health Service in 2006.

The aim of this video is to highlight theoretical electrosurgical principles as they relate to safety aspects and practical applications of monopolar electrosurgery.

METHOD & RESULTS: We briefly trace the history of electrosurgical development and the engineering innovations that have rendered monopolar energy inherently safe.

The efficacy and versatility of this modality is further emphasized through a series of instructive surgical video clips.

CONCLUSIONS: Monopolar electrosurgery is an important mainstay of operative laparoscopic surgery.

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THE ROLE OF EXPLORATORY LAPAROSCOPY FOR SUSPECTED BOWEL INJURY AFTER DIFFICULT LAPAROSCOPIC SURGERY

FRIDAY 28 MAY / FREE COMMUNICATIONS G
COMPLICATIONS / 1418-1427

Bignardi T, Khong S-Y, Lam A

The incidence of bowel injuries increases from 0.06 to 0.5% for diagnostic laparoscopy to 0.3 – 0.5% in operative laparoscopy. While relatively uncommon, bowel injuries can result in serious complications including death following laparoscopy. The commonest sites of injury are small bowel (58%), colon (32%) and stomach (8%). Bowel injuries may happen during the entry phase of laparoscopy or during the surgery itself, as thermal injuries from electro-surgery, herniation through port sites or anastomotic leaks. Extensive adhesiolysis, often required for the treatment of severe endometriosis, has been found to be a significant risk factor for bowel injury. In general, the later the diagnosis, the higher the morbidity and mortality: early recognition and appropriate intervention is the key to improve the outcome of laparoscopy-associated bowel injuries.

We would like to present two cases in which a bowel injury was suspected after difficult laparoscopic surgery. A strong focus will be on the role of exploratory laparoscopy in the management of such cases – prevention strategies will be discussed as well.

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LAPAROSCOPIC MANAGEMENT OF URINARY TRACT INJURIES

FRIDAY 28 MAY / FREE COMMUNICATIONS G
COMPLICATIONS / 1427-1435

Andou M

INTRODUCTION: Urinary tract injuries are one of the most frequent complications during total laparoscopic hysterectomy. When it occurs, the case is generally referred to an urologist with the chance that they may recommend a conversion to laparotomy. If it could be managed laparoscopically the repair would follow the minimally invasive theme of the initial procedure.

MATERIALS/METHOD: 1999 we have performed 2053 cases of TLH for benign pathology. 5 of these cases experienced intraoperative urinary tract injuries. All of the cases were managed successfully totally laparoscopically in the same surgical session. Case 1 underwent end-to-end anastomosis of the pelvic ureter due to injury at the IFP ligament. Each cut end was spatulated to prevent stenosis of the anastomotic site. Cases 2 and 3 underwent ureteral reimplantation due to injuries at the cardinal ligament and at the anterior leaf of the vesicouterine ligament respectively. Anti-reflux extravesical ureteroneocystostomy was performed. After incising the detrusor muscle of the bladder, the bladder mucosa is exposed. The caudal end of the mucosa is opened and the caudal end of the transected ureter is anastomosed to the mucosa after fixation with anchor suture. The detrusor muscle is reapproximated over the ureter and bladder mucosa so

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as to make an anti-reflux mechanism. Case 4 required the Boari-flap and Psoas hitch techniques for extensive urinary tract thermal injury during hemostasis in which a new urinary duct was created using a bladder flap resulting in extending the bladder to deal with the shortness of the ureter. Case 5 experienced very severe bladder laceration during retrieval of the specimen through the vagina. Two layer reapproximation was required extensively. We developed a new technique for the laparoscopic placement of the double J stent without cystoscopy. It is helpful for management of urinary tract injury.

RESULTS: All the cases could be repaired in the same operative session without conversion. No other complications occurred in these cases. No urinary tract stenosis or urinary tract fistula occurred. No cases required blood transfusion. The recovery is very quick.

CONCLUSIONS: The avoidance of complications is of course the most important goal in all surgery but once injuries occur, the next best strategy is to be able to repair the injury in the same operative session and in the least invasive manner. Knowledge of reconstructive techniques and good establishment of hand-eye coordination as well as skills in very precise intracorporeal suturing are vital in these kinds of unpredictable scenarios.

REFERENCES:

1. Brandes S, Coburn M, Armenakas N, McAninch J. Diagnosis and management of ureteric injury : an evidence – based analysis. *BJU Int.* 2004;94:277-289.
2. Johnson N, Barlow D, Lethaby A, Tavender D et al. Surgical approach to hysterectomy for benign gynaecological disease *Cochrane Database Syst. Rev.* 2005:CD003677.

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VAULT DEHISCENCE AFTER LAPAROSCOPIC HYSTERECTOMY IN A 9 YEAR PERIOD AT SYDNEY WEST ADVANCED PELVIC SURGICAL UNIT

FRIDAY 28 MAY / FREE COMMUNICATIONS G
COMPLICATIONS / 1435-1445

Chan WSW, Kong KY, Nikam Y, Merkur H

INTRODUCTION: To evaluate the incidence, timing and presenting symptoms of vault dehiscence after laparoscopic hysterectomy in order to gain further understanding of patient risk factors and surgical technique that may predispose to this complication.

MATERIALS/METHOD: A retrospective analysis of all patients undergoing laparoscopic hysterectomy at Sydney West Advanced Pelvic Surgical Unit (SWAPS) was performed in the 9 year period from 2001-2009. The patients whose post-operative course was complicated by vault dehiscence were reviewed and possible pre-operative, intra-operative and post-operative risk factors identified. A literature search was also performed to assess the current understanding and incidence of vault dehiscence post laparoscopic hysterectomy.

RESULTS: Between 2001-2009, a total of 1224 hysterectomies were performed by SWAPS surgeons of which 989 (80.80%) were performed laparoscopically. A total of 5 (0.51%) patients presented with vault dehiscence post-operatively, all of whom had a total laparoscopic hysterectomy performed. The baseline characteristics included a mean age

of 42.8 years (37-51 years), mean BMI of 26.8kg/m² (23.8-32.3kg/m²) and a mean parity of 2 deliveries (1-3 deliveries).

The main presenting symptom with all 5 patients was sudden onset vaginal bleeding representing to hospital at a mean of 18 days (11-28 days) post-operatively. All patients were initially discharged well at an average of 2.6 days (2-3 days).

Intra-operatively, vault haemostasis was achieved using a combination of monopolar and bipolar diathermy techniques. Laparoscopic suturing was used for vault closure in all 5 reported cases using Vicryl sutures in a continuous manner, the ends being tied vaginally. Post-operatively, one patient was on warfarin for previous multiple cerebrovascular accidents but the others were not on anticoagulant therapy apart from prophylactic Clexane in the immediate post-operative hospital stay. Other comorbidities in our patient group included Type II diabetes mellitus and hypertension.

CONCLUSIONS: Vault dehiscence is a rare complication after hysterectomy, but more common after a laparoscopic approach^{1,2}. Vaginal bleeding is the main presenting symptom with vaginal eversion, pain and watery discharge being less common^{1,3}. Patient comorbidities such as diabetes and anticoagulant therapy are important, but intra-operative procedures such as laparoscopic suturing, type of suture and methods of achieving haemostasis seem equally important.

REFERENCES:

1. Agdi M, Al-Ghafri W, Antolin R, et al. Vaginal vault dehiscence after hysterectomy. *Jminim Invasive Gynecol.* 2009;16:313-317.
2. Hur HC, Guido RS, Mansuria SM et al. Incidence and patient characteristics of vaginal cuff dehiscence after different modes of hysterectomies. *Jminim Invasive Gynecol.* 2007;14:311-317.
3. Kho RM, Akl MN, Cornella JL et al. Incidence and characteristics of patients with vaginal cuff dehiscence after robotic procedures. *Obstet Gynecol.* 2009;114:231-235.

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AN UNCOMMON CASE: EPIGASTRIC ARTERY INJURY AT UMBILICAL PORT ENTRY DURING LAPAROSCOPIC HYSTERECTOMY

FRIDAY 28 MAY / FREE COMMUNICATIONS G
COMPLICATIONS / 1445-1454

Nikam Y, Merkur H

Vascular injury is a dreaded complication in laparoscopic surgery. Following is a case of vascular injury to the ascending branch of the epigastric artery at the umbilical port. This case was successfully managed with laparoscopic placement of sutures.

INTRODUCTION: Mrs. MD, 59 year old Para 3 underwent Total Laparoscopic Hysterectomy (TLH) with Monarc sub-urethral sling at our unit for severe menorrhagia with stress urinary incontinence. Surgery was uneventful. 8 hours postoperatively she progressively collected 600ml of serosanguinous fluid in her drain. She was hypotensive and tachycardic. With initial resuscitative measures, she was hemodynamically stabilized.

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Decision was taken to return to theatre for exploration. After discussion with the anaesthetists it was decided to proceed with laparoscopy with the intention of arresting bleeding.

At laparoscopy, pneumo-peritoneum was achieved through Palmer's point and 5mm optical port entry was done. It was immediately noted that the umbilical port was bleeding and she had a hemo-peritoneum of about 1000ml. 2 endo-close sutures were used laparoscopically to achieve homeostasis. Hysterectomy pedicles were noted to be secure. Thorough suction-irrigation of the pelvis was done. She required 4 units of packed cell transfusion, recovered well and was discharged 3 days postoperatively.

MATERIALS/METHOD: Case Report

RESULTS: The reason to publish this case is to highlight 2 important points

1. Using the traditional laparotomy mode we would have missed the bleeding umbilical port.
2. Umbilicus is a well vascularised structure of the abdominal wall and care should be exercised during laparoscopic entry into the abdomen.

The umbilicus receives arterial inflow by means of three distinct deep sources in addition to the subdermal plexus. These deep sources are the right and left deep inferior epigastric arteries that each give off several small branches, and a large ascending branch, which courses between the muscle and the posterior rectus sheath passing directly to the umbilicus; the ligamentum teres hepaticum; and the median umbilical ligament.¹

CONCLUSIONS: This suggests that the ascending branch of the epigastric artery can be injured during laparoscopic entry. In our unit we have adopted the way of pulling the trocar sleeve over the scope while the scope is still in the abdomen. This way the port can be visualized whilst withdrawing the scope with the hope that any significant bleeders will be noted.

This approach, laparoscopy over laparotomy should be carefully chosen after taking into consideration the patient's clinical status and anaesthetic safety.

REFERENCES:

1. Arterial vascular anatomy of the umbilicus STOKES R. B, WHETZEL T. P, SOMMERHAUG E, SAUNDERS C. J. Plastic and reconstructive surgery ISSN 0032-1052 1998, vol. 102, no3, pp. 761-764 (5 ref)

AUTHOR AFFILIATION: Y. Nikam, H. Merkur; Sydney West Advanced Pelvic Surgery, NSW, Australia

COMPLICATIONS IN LAPAROSCOPY – LESSONS FROM 10 YEARS SERIES

FRIDAY 28 MAY / FREE COMMUNICATIONS G
COMPLICATIONS / 1454-1503

Siow A, Chua I

INTRODUCTION: The only way to absolutely avoid laparoscopic complications is to not perform surgery. As laparoscopy is becoming the ubiquitous route for gynecological surgery, complications will always exist, if not become more prevalent. As surgeons we are all at risk of encountering complications and when unpredicted findings occur, this risk escalates. Fortunately, the incidence of complication is still very low and in good institutions consistently below 0.5%. This presents a paradox; on one hand

a low complication rate is reassuring to our patients, but on the other hand, it presents a limited number of teaching examples for our residents to learn and avoid repeating such complications. We present a series of complications culminated over 10 years of surgical audit at the KK Women's & Children's Hospital with a view to elucidate the risk factors, causation and possible teaching pearls. We hope through such sharing, lessons can be learnt to keep laparoscopic complications at bay.

MATERIALS/METHOD: A 10 year retrospective review of laparoscopic complications at KK Women's & Children's Hospital, Singapore.

RESULTS: A total of 13,160 major therapeutic laparoscopic procedures were undertaken from 1999 – 2009. There were a total of 53 complications resulting in a complication rate of 0.4%. The main associating factors for these complications were electrosurgery and Veere's Needle peritoneal access.

CONCLUSIONS: The incidence of laparoscopic complication at KK Women's & Children's Hospital is 0.4%. This is comparable to previous reported incidence worldwide.

REFERENCES:

1. A Lam, Y Kaufman, SY Khong et al. Dealing with complications in laparoscopy. Best Practice & Research Clinical Obstetrics and Gynaecology 2009; 23: 631-646.

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UTERINE ARTERY RUPTURE DURING CLIP APPLICATION

FRIDAY 28 MAY / FREE COMMUNICATIONS G
COMPLICATIONS / 1503-1512

Aust T, O'Neill A, Rosen D, Chou D, Cario G

INTRODUCTION: Prophylactic uterine artery occlusion may be used during laparoscopic hysterectomy or myomectomy to reduce intraoperative blood loss in potentially difficult cases. Following dissection of the artery from its surrounding structures, clips may be used to provide permanent or temporary occlusion of the vessel.

MATERIALS/METHOD: We report a case in which a clip had been inadvertently partially closed so that the tips were touching but the remainder of the clip was still separate and still in the jaws of the applicator. This clip was pushed onto the artery causing immediate haemorrhage.

RESULTS: The haemorrhage was controlled with proximal pressure on the artery from a pair of forceps and the application of further clips. The rest of the procedure then continued without incident.

CONCLUSIONS: Laparoscopic surgeons need to be aware that some clip applicators may partially close the ends of a clip together without expelling the clip. If this is then placed onto a vessel then the arterial bleeding could be very difficult to control.

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Free Communications Abstracts SESSION G

OPERATIVE LAPAROSCOPY COMPLICATIONS IN 6607 CASES IN AN ADVANCED GYNAECOLOGICAL ENDOSCOPY UNIT

FRIDAY 28 MAY / FREE COMMUNICATIONS G
COMPLICATIONS / 1512-1521

O'Neill A, Aust T, Rosen D, Chou D, Carlton M, Cooper M, Reid G, Cariogm

INTRODUCTION: Our aim was to review the total number of surgeries performed over five years (2005-2009) in a single endoscopic centre, and report on the incidence of associated complications.

MATERIALS/METHODS: This was a retrospective chart analysis of 6607 consecutive operative laparoscopy cases of a multi-centre urban gynaecologic endoscopy group practice of 6 advanced laparoscopic surgeons. Six thousand six hundred and seven (6607) women undergoing operative laparoscopy for gynaecological indications were analysed. Procedures performed included total laparoscopic hysterectomy, laparoscopic pelvic floor repairs including laparoscopic mesh sacro-colpopexy, laparoscopic Burch colposuspension, laparoscopic excision of endometriosis, laparoscopic myomectomy, laparoscopic adnexal surgery and laparoscopic adhesiolysis.

RESULTS: A total of 6607 cases were performed, 5742 (86%) of those were major gynaecologic laparoscopic cases and 942 (14%) of those were minor laparoscopic and hysteroscopic cases. The total 5665 major laparoscopic cases were comprised of the following: 1665 (25%) hysterectomies including 327 (19.6%) with technically demanding fibroids, 922 (13.9%) pelvic floor repairs and Burch colposuspensions, including 207 (3%) lap mesh sacrocolpopexies and 221 (3.3%) myomectomies, There were 1756 (26.3%) excisions of grade I-IV endometriosis, 747 (11%) adnexal surgeries, 325 (5%) adhesiolysis, and 106 (1.6%) miscellaneous surgeries. Of the total 6607 surgeries, 39 major complications occurred, which yields a complication rate of 0.59%. There were 7 (0.1%) ureteric injuries, 13 (0.2%) bladder injuries, and 7 (0.1%) large bowel injuries. There was one major vessel injury and 29 (0.4%) patients required transfusion. There were 6 episodes of thromboembolism. There were 9 (0.13%) laparotomies to handle a complication and 16 (0.24%) conversions to laparotomy for technical reasons. There were 16 (0.24%) unintended returns to theatre, and 22 significant readmissions to hospital post-operatively.

CONCLUSIONS: Despite the large number of major procedures performed laparoscopically at our centre and the increasing complexity of the operations, the complication rates remain very low.

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XCEL BLADELESS TROCAR VERSUS VERESS NEEDLE: A RANDOMISED CONTROLLED TRIAL COMPARING THESE TWO ENTRY TECHNIQUES IN GYNAECOLOGICAL LAPAROSCOPIC SURGERY (INTERIM RESULTS)

FRIDAY 28 MAY / FREE COMMUNICATIONS G
COMPLICATIONS / 1521-1530

Manley T, Vollenhoven B, Tsaltas J, Lawrence A, Najjar H, Pearce S, J. Tan, Chan KW, Wang L

INTRODUCTION: The method most commonly used to gain entry to the abdomen in laparoscopic surgery amongst gynaecologists is the Veress Needle. The ENDOPATH® XCEL™ Bladeless Trocar is another method of inserting the operating telescope whereby you don't need to first introduce gas before the trocar. This trocar is widely used in laparoscopic surgery but it is uncommon to the field of gynaecology.

This project aims to compare the two methods with regard to:

1. Time taken to enter the abdomen.
2. The number of attempts taken to enter the abdomen.
3. The impact of the time taken to enter compared to the whole operating time.

MATERIALS/METHOD: Ethics approval has been gained from each site.

This trial is registered with clinicaltrials.gov. Registration No. TRM-001

Women are currently being recruited to this study at these two centres. We are aiming to recruit 200 women. Once recruited, patients are randomly assigned one of two entry techniques, either Veress (control) or XCEL Bladeless trocar. The primary end point is time from first skin incision to operating pressure achieved with telescope in the abdomen.

RESULTS: There have been no complications at entry so far in this trial.

To date we have recruited 35% of the intended study population.

For women recruited to the Veress arm of the trial the median entry time was 4min 30sec. For women recruited to the XCEL Bladeless arm the average entry time was 2min 01sec.

This a difference of 2min 29sec.

Other secondary observations; trend to increased number of attempts at entry for the Veress needle and decreased 'happiness' of entry with the Veress needle.

CONCLUSIONS: We aim to complete this trial by the end of 2010 and to show a significant difference in the time taken to gain access to the abdomen using these different entry techniques.

So far the data suggests that the Veress needle entry takes more than one and a half times longer than the XCEL Bladeless trocar.

REFERENCES:

1. Lalchandani S, Phillips K. Laparoscopic entry technique – a survey of practises of consultant gynaecologists. *Gynecol Surg*, 2005, 2: 245-9.
2. Kaloo P, Cooper M, Malloy D. A survey of entry techniques and complications of members of the Australian Gynaecological Endoscopy Society. *Aust NZ J Obstet Gynaecol* 2002; 42(3): 264-6.
3. Malloy D, Kaloo PD, Cooper M, Nguyen TV. Laparoscopic entry: A literature review and analysis of techniques and complications of primary port entry. *Aust NZ J Obstet Gynaecol* 2002, 42: 246-54.

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Free Communications Abstracts SESSION H

LAPAROSCOPIC MESH SACROCOLPOPEXY AND RECTOPEXY IN A WOMAN WITH MULTI-COMPARTMENT PROLAPSEFRIDAY 28 MAY / FREE COMMUNICATIONS H
PELVIC ORGAN PROLPASE / 1400-1409O'Neill A, Aust T, Rosen D, Gan S, Chou D, Cario GM

INTRODUCTION: Multi-compartment pelvic floor disorders are now increasingly being evaluated and managed jointly by gynaecologists and colorectal surgeons. A high incidence of concomitant rectal intussusception (55%) and rectal prolapse (38%) has been reported in females who presented with urogenital prolapse^{1,2}. Various surgical options exist for patients with pelvic organ prolapse. Many abdominal procedures for single organ prolapse are now performed laparoscopically. The literature on surgical procedures that address multiple organ prolapse is growing.^{3,4} In cases with prolapse of more than one compartment, a single surgical procedure is needed that corrects all affected compartments including associated rectocele with minimal risk of complications, minimal hospital stay and minimal morbidity.

MATERIALS/METHOD: We present a case of a 56 year old lady who complained of a vaginal lump with pressure for 4 years with a BACKGROUND history of vaginal hysterectomy and anterior repair 6 years earlier. She also complained of a lump felt rectally on defecation. Examination revealed Stage 3 POP-Q posterior wall prolapse, along with a 7cm full thickness rectal prolapse. She underwent a laparoscopic mesh sacrocolpopexy and rectopexy.

CONCLUSIONS: We demonstrate the salient features that make this joint operation to target multi-compartment prolapse laparoscopically a logical choice.

REFERENCES:

1. Mellgren A, Johansson C, Dolk A, et al. Enterocoele demonstrated by defecography is associated with other pelvic floor disorders. *Int J Colorectal Dis* 1994; 9: 121 – 4.
2. Spence-Jones C, Kamm MA, Henrymm, Hudson CN. Bowel dysfunction: a pathogenetic factor in uterovaginal prolapsed and stress urinary incontinence. *BJOG* 1994; 101: 147-152.
3. Sagar P, Thekkinkattil D, Heath R, Woodfield J, Gonsalves S, Landon C. Feasibility and functional outcome of laparoscopic sacrocolporectopexy for combined vaginal and rectal prolapse. *Dis Colon Rectum* 2008; 51: 1414-1420.
4. Slawik S, Soulsby R, Carter H, Payne H, Dixon A. Laparoscopic ventral rectopexy, posterior colporrhaphy and vaginal sacrocolpopexy for the treatment of recto-genital prolapse and mechanical outlet obstruction. *Colorectal Disease* 2007; 10, 138 – 143.

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LAPAROSCOPIC EXTRACTION OF ARM OF ANTERIOR PROLIFT CAUSING NERVE ENTRAPMENT SYMPTOMSFRIDAY 28 MAY / FREE COMMUNICATIONS H
PELVIC ORGAN PROLPASE / 1409-1418Aust T, O'Neill A, Chou D, Rosen D, Cario G

INTRODUCTION: A 53 year old woman underwent insertion of anterior and posterior PROLIFT devices for symptomatic cystocele and rectocele. Following this she developed considerable discomfort in the left sacroiliac/paralumbal area and left side of the pelvis which was exacerbated by sitting. CT and MRI imaging failed to find any abnormality and after 5 months the meshes were removed vaginally to try to stop the pain. The pain did not subside so a neurosurgical opinion was sought. They felt that the pain was not related to mild lumbar disc degeneration. Steroid injections over the remaining arm of mesh behind the obturator internus were attempted without success.

MATERIALS/METHOD: She was then referred to our unit for laparoscopic removal of the remaining mesh. At laparoscopy the bladder was dissected down as for a laparoscopic Burch colposuspension. The remaining mesh was seen to be passing through the obturator muscle but was displaced anteriorly, away from the ischial spine.

RESULTS: The mesh was excised and the patient discharged later that day.

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LAPAROSCOPIC ANTERIOR MESH REPAIR – A NEW TECHNIQUE?FRIDAY 28 MAY / FREE COMMUNICATIONS H
PELVIC ORGAN PROLPASE / 1418-1427O'Neill A, Aust T, Cook J, Rosen D, Chou D, Cario GM

INTRODUCTION: Recurrent anterior vaginal wall prolapse remains a major problem in pelvic reconstructive surgery. Risk of re-operation after failed prolapse surgery has been quoted as high as 30%¹. In an attempt to improve the outcomes of prolapse surgery, surgeons have used a variety of synthetic or biologic materials as grafts. Graft use allows for a broader base of support and avoids the need to be dependent on existing weakened fascia and musculature.

The best available level I and II evidence indicates that anterior repair with the addition of any mesh is more effective than anterior repair alone². Type I synthetic meshes have the lowest reported incidence of infection and erosion of all the synthetic meshes, however studies show erosion rates ranging from 9–11% for vaginally placed polypropylene mesh^{3,4}.

MATERIALS/METHODS: Here we present a video of our first case of laparoscopic anterior mesh repair and highlight the steps regarding its placement.

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CONCLUSIONS: Laparoscopic placement of mesh for pelvic organ prolapse repair, such as in mesh sacrocolpopexy, has been associated with a lower rate (4.3%) of mesh erosion⁵ than vaginally placed mesh. Hence, it would seem logical that if we could target anterior vaginal wall prolapse laparoscopically, we could reduce the associated complications.

REFERENCES:

1. Olsen AL, Smith VJ, Bergstrom JO et al. Epidemiology of surgically managed pelvic organ prolapse and urinary incontinence. *Obstet Gynecol* 1997;89:501-506.
2. Maher C, Baessler K, GlazenercmA et al. Surgical management of pelvic organ prolapse in women. *Cochrane Database Syst Rev* 2007;(3):CD004014.
3. Dwyer PL, O'Reilly BA. Transvaginal repair of anterior and posterior compartment prolapsed with Atrium polypropylene mesh. *BJOG* 2004;111:831-836.
4. Hung MJ, LiuFS, Shen PS et al. Factors that affect recurrence after anterior colporrhaphy procedure reinforced with four corner anchored polypropylene mesh. *Int Urogynecol J Pelvic Floor Dysfunct* 2004;15: 399-406.
5. Brubaker L, Nygaard I, Richter H et al. Two-year outcomes after sacrocolpopexy with and without Burch to prevent stress urinary incontinence. *Obstet Gynecol* 2008;112:49-55.

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THE KEY TO LAPAROSCOPIC PELVIC FLOOR REPAIR. THE ROLE OF 'UTEROSACRAL FASCIAL MARKER SUTURE' IN VAGINAL VAULT SUSPENSION

FRIDAY 28 MAY / FREE COMMUNICATIONS H
PELVIC ORGAN PROLPASE / 1427-1435

Krishnan S, Lamaro V, Li Y

Vaginal vault suspension is a common procedure in the post menopausal population and in those who have had a hysterectomy. It is estimated that by 80 years old, 15% of women would have undergone pelvic floor repair. Traditionally, the uterine division of the uterosacral ligament has been the key ligament for vault (Level 1) support following vaginal hysterectomy. In cadaver studies, it has been shown that the optimum site of fixation of the Uterosacral ligaments is the proximal section which provides a strong fixation site without close proximity to vital structures and transmits minimal tension to the ureters (Buller et al 2001).

We will describe our study and technique in utilising the mid to proximal uterosacral ligament as the initial marker suture in those women undergoing either a Total laparoscopic hysterectomy or in a LAVH.

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THE EVOLUTION OF LAPAROSCOPIC PELVIC FLOOR REPAIR IN THE SYDNEY WOMENS ENDOSURGERY CENTRE

FRIDAY 28 MAY / FREE COMMUNICATIONS H
PELVIC ORGAN PROLPASE / 1435-1445

O'Neill A, Aust T, Rosen D, Chou D, Cook J, Cario GM

INTRODUCTION: Pelvic organ prolapse has been traditionally managed by vaginal hysterectomy and appropriate vaginal repairs¹. Despite this, up to 30% of women require repeat surgery to address recurrent prolapse, which may occur in a compartment which was previously unaffected². To combat this problem, new techniques have been developed to include the use of synthetic mesh to replace deficient fascial tissues and thereby augment the repair along with vaginal tape procedures and a laparoscopic approach to pelvic floor repair.

In our unit, we have developed our laparoscopic approach to pelvic organ prolapse surgery, from initial site specific repair where we began to dissect the rectovaginal space, to encompass the aim of restoring pelvic floor anatomy by correcting all anatomic defects in all affected compartments (anterior, posterior, apical). This journey has allowed us to acquire the knowledge and skills to progress to performing laparoscopic mesh sacrocolpopexy, the operation of choice for global prolapse repair.

MATERIALS/METHODS: We examine our approach to pelvic floor surgery from our Unit's early days and compare this to our present day approach to gain an insight into the evolution of our Unit's ability to treat pelvic organ prolapse. We present video footage to highlight the progression and development of the necessary skills, and we look at pelvic organ prolapse quantification (POP-Q) outcomes of our surgical interventions.

RESULTS: Of our laparoscopic pelvic floor repair group, 55 of 64 patients were available for 2-year follow-up. 22 patients were Stage 0, 21 patients were Stage 1, 10 patients were Stage 2 and 2 patients were Stage 3. This gives an overall 78% success rate for laparoscopic pelvic floor repair at 2 years.

Of our laparoscopic mesh sacrocolpopexy group, 24 of 54 patients were available for 1-year follow-up. 12 patients were Stage 0, 11 patients were Stage 1 and 1 patient was Stage 2. This gives an overall success rate of 96% for laparoscopic mesh sacrocolpopexy.

CONCLUSIONS: As our Units laparoscopic pelvic floor reconstruction technique has evolved to a more global approach, we show the benefits of the evolution by objective assessment.

REFERENCES:

1. Karramm, Sze EHM, Walters MD. Surgical treatment of vaginal vault prolapsed. In: Walters MD, Karramm, editors. *Urogynaecology and Reconstructive Pelvic Surgery*. 2nd ed. St Louis: Mosby; 1999: p.235-256.
2. Olsen AI, Smith VJ, Bergstrom JO et al. Epidemiology of surgically managed pelvic organ prolapse and urinary incontinence. *Obstet Gynecol* 1997;89:501-506.

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Free Communications Abstracts SESSION H

HYSTERECTOMY DOES NOT REDUCE RECURRENCE OF LEVEL ONE FEMALE PELVIC ORGAN PROLAPSE (POP), WHEN COMBINED WITH POSTERIOR INFRACOCYGEAL COLPOPEXY

FRIDAY 28 MAY / FREE COMMUNICATIONS H
PELVIC ORGAN PROLAPSE / 1445-1454

Barry C, Juneja M

INTRODUCTION: Hysterectomy may not address the underlying weakness that causes uterovaginal prolapse, has not been proven to reduce recurrence but has an associated morbidity. Synthetic graft augmentation may offer an alternative option but has its own complications.

MATERIALS/METHOD: Twenty-one women were recruited as a pilot study through a urogynaecology clinic, and were randomised into two groups. Criteria for entry were uterine prolapse of at least grade 2 on POP-Q measures. Subjects underwent a POP-Q examination, and p-QOL questionnaire. Women in the conservation group (C) underwent a posterior infracoccygeal colpopexy (PICC) and hysterectomy. The hysterectomy group (H) underwent PICC with vaginal hysterectomy. Both groups had associated prolapse/ incontinence surgery as necessary. Peri- and post-operative data was collected and re-assessment undertaken at 12 months. Categorical variables were compared with unpaired t-test.

RESULTS: Of the 21 women recruited 5 datasets were unavailable. Of the 16 datasets, 9 were in the hysterectomy group and 7 in the conservation group. There was no difference between the groups in age, BMI, parity and previous surgery. Four in the conservation group had an anterior graft vs none in the hysterectomy group ($p=0.57$). There was no statistical difference between the groups in relation to blood loss ($p=0.15$), hospital stay ($p=0.10$), Hb (0.20), catheter days (0.81), pain scores VAS (0.7), return to daily activities ($p=0.69$), re-operation (0.36), mesh erosion ($p=0.48$). Mesh erosion occurred in 2 women in the hysterectomy and none in the conservative group. Duration of surgery was significantly reduced in the conservation group ($p=0.05$).

Point C was similar in both groups prior to surgery, +2.5cm (H) vs. +1.5cm (C), $p=0.09$. Post surgery at 12 months point C was -5.7cm (H) vs. -5.0cm (C), $p=0.23$. All parameters on the quality of life questionnaire improved in both groups but there was no significant difference between groups. (Mann-Whitney tests).

CONCLUSIONS: Both groups improved objectively and subjectively at 12 months. There was no difference in change between the two groups. The mesh erosion rate was not statistically significant but we recognise this was a small study. Placement away from the vault incision may lessen its morbidity. More grafts were used anteriorly in the conservation group, which may have skewed our results. This small pilot study suggests that hysterectomy at the time of level one prolapse surgery confers no advantage.

(This study was sponsored by AGES)

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LAPAROSCOPIC SACROCOLPOPEXY: GOLD STANDARD FOR VAULT PROLAPSE

FRIDAY 28 MAY / FREE COMMUNICATIONS H
PELVIC ORGAN PROLAPSE / 1454-1503

Bedford N, O'Shea R, Seman E, Cook J, Behnia-Willison F, Gibberd S, Keirse M

INTRODUCTION: Upper vaginal support defects may arise in combination with multi-compartment prolapse, or following hysterectomy where a break in continuity between the rectovaginal and pubocervical fascias allows development of an enterocele. Traditionally the vault has been repaired either vaginally with excision of the enterocele sac and suspension to the uterosacral or sacrospinous ligaments, or abdominally by open mesh sacrocolpopexy.

With advances in laparoscopic instrumentation, visualization and expertise, the Laparoscopic Mesh Sacrocolpopexy (and sacrohysteropexy) has gained popularity¹. The advantages to the patient are those of most laparoscopic procedures – a good cosmetic result, less postoperative discomfort, a shorter hospital stay and a quicker return to function. A significant benefit is the maintenance of a neutral vaginal axis with minimal narrowing to allow normal coitus. Systematic review² has identified the mesh sacrocolpopexy as offering the greatest chance of objective cure for DeLancey Level 1 defects. Published objective success rates are routinely above 90%.

MATERIALS/METHOD: A continuously updated database of all pelvic floor procedures is kept at Flinders Medical Centre. 54 patients undergoing laparoscopic sacrocolpopexy or sacrohysteropexy were objectively reviewed preoperatively and postoperatively with POP-Q scoring. Details of operative time, intra- and postoperative complications were recorded. Follow-up is to a mean of 52 weeks.

RESULTS: No vault failures were noted. Operative time, early and late complications are comparable to published series. Subsequent prolapse developed in 11 patients (20%) – anterior compartment (7 patients), posterior compartment (3) and combined (1).

CONCLUSIONS: Mesh Sacrocolpopexy is the treatment of choice for vault prolapse. The difficulty for the surgeon is the requirement for advanced laparoscopic skills and a significant learning curve to overcome³. More recently vaginal mesh kits have gained popularity, particularly in view of their ease of use and relatively standardized placement, however these are not without their own complications. Now that we have come of age, the Laparoscopic approach should be the gold standard.

REFERENCES:

1. Ganatra AM, Rozet F, Sanchez-Salas R et al. The current status of laparoscopic sacrocolpopexy: A review. *Eur Urol* 2009; 55:1089-1105.
2. Maher C, Baessler K, Glazener C et al. Surgical Management of Pelvic Organ Prolapse in Women. *Cochrane Database of Systematic Reviews* 2007 Issue 3 Art. No.: CD004014. DOI: 10.1002/14651858.CD004014.pub3.
3. Claerhout F, De Ridder D, Roovers JP et al. Medium-term anatomic and functional results of laparoscopic sacrocolpopexy beyond the learning curve. *Eur Urol* 2009; 55:1459-1468.

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Free Communications Abstracts SESSION H

USE OF SURGISIS IN THE TREATMENT OF ANTERIOR AND POSTERIOR VAGINAL PROLAPSE

FRIDAY 28 MAY / FREE COMMUNICATIONS H
 PELVIC ORGAN PROLAPSE / 1503-1512

Gibberd S., Seman E, Cook J, Behnia-Willison F, Lam C

INTRODUCTION: Satisfactory surgical treatment of vaginal prolapse remains elusive to gynaecologists with re-operation rates of up to 30%. As a result there continues to be much interest in the use of mesh augmentation to reduce failure rates however the use of permanent meshes has been limited by high complication rates and side effects (e.g. graft erosion and dyspareunia)¹. Surgisis (extracted from the submucosa of porcine small intestine) is designed to act as a scaffold for host tissue regrowth with eventual replacement by the host. This would theoretically result in less long-term complications although concerns remain with regards to the graft strength and overall success rates².

MATERIALS/METHOD: 65 women with symptomatic prolapse of the anterior and or posterior compartment (+/- vault) underwent vaginal repair with augmentation by Surgisis between 2003 and 2009. Pre-op and post-operative POP-Q assessment was recorded with failure regarded as equal or greater than POP-Q stage 2 or symptomatic as described by the patient on questioning with regards to bowel, bladder and sexual function. Women were reviewed 6 monthly for 2 years, then annually.

RESULTS: Of the 65 women, 39 had a Surgisis tailor-made graft placed in both the anterior and posterior compartment, 10 in the anterior compartment only and 16 the posterior only. 44 (68%) of these women had concomitant surgery for treatment of vault prolapse either with attachment of Surgisis to the sacrospinous or uterosacral ligaments. 59 women (90.7%) had previously undergone vaginal surgery or suffered from a POP-Q stage greater or equal to 3 (43 and 16 respectively). Patient characteristics consisted of a median age of 66 years (40-84), mean weight of 75kg (48-110) median parity 2 (0-4) and average hospital stay of 5.4 days (2-43). There was a 6% (4) major complication rate consisting of 3 with a total estimated blood loss of >1000mL and 1 bowel injury.

At the time of follow-up (average duration 75 weeks (6-294)) 66% of women had not experienced recurrent prolapse in any compartment and 87.7% were considered a subjective success. The objective success rate in the compartment treated was 77%.

4.6% (3) requested further prolapse surgery for which one had permanent mesh inserted to the recurrent site and 2 underwent native tissue repairs in a previously untreated compartment.

CONCLUSIONS: The use of surgisis for treatment of vaginal prolapse in high risk women (previous surgery, POP-Q stage \geq 3) is emerging as a viable alternative to repair with permanent mesh.

REFERENCES:

1. Sung, V.W., Rogers, R.G., Schaffer, J.I., et al, Graft Use in Transvaginal Pelvic Organ Prolapse Repair: A Systemic Review *Obstetrics and Gynecology* 2008; 112 (5) 1131-1142
2. Trabuco, E.C., Klingele, C.J., Gebhart, J.B., Xenograft use in reconstructive pelvic surgery: a review of the literature *Int Urogynecol J* 2007; 18: 555-563

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LAPAROSCOPIC PARAVAGINAL REPAIR: IS THE CHALLENGE WORTH IT?

FRIDAY 28 MAY / FREE COMMUNICATIONS H
 PELVIC ORGAN PROLAPSE / 1512-1521

Bedford N, O'Shea R, Seman E, Behnia-Willison F, Cook J, Lam C, Gibberd S, Keirse M

INTRODUCTION: The concept of the Paravaginal Repair is not new, having been first described by White in 1909. Vaginal and then abdominal approaches were developed, and success rates of 67-100% have been published¹. However, technically it is a challenging operation, requiring extensive dissection vaginally or in the retropubic space. With the advent of mesh kits for anterior wall prolapse, few now routinely perform the procedure (12% in an Australasian survey)².

With the development of laparoscopic expertise and techniques, as well as improving optics and instrumentation, there has never been a better time to re-evaluate our results with this procedure.

MATERIALS/METHOD: 404 women undergoing laparoscopic paravaginal repair, alone or in combination with additional procedures, have been followed for up to 10 years. Preoperative and serial postoperative objective assessments with POP-Q scoring has been performed. Data on operative time, intraoperative and postoperative complications has been recorded. This represents one of the largest series in the literature³.

RESULTS: Results for the anterior compartment are an improvement on traditional midline plication, with an overall 79% objective success rate. When recurrence occurs it tends to be a midline cystocele. If symptoms require reoperation, this is simply achieved with a native tissue repair, or with a porcine or mesh graft, raising the objective cure rate to 88% (POP-Q stages 0 or 1).

CONCLUSIONS: Conceptually the paravaginal repair is in agreement with our knowledge of the genesis and anatomy of anterior vaginal wall defects, and it offers a superior success rate to traditional midline plication. In addition it avoids many of the potential complications of mesh by not requiring any vaginal incision. From a patient perspective the technique shares the advantages of all laparoscopic operations, and for the surgeon it remains a challenging procedure to perfect.

REFERENCES:

1. Miklos J, Moore R, Kohli Neeraj. Laparoscopic surgery for pelvic floor defects. *Curr Opin Obstet Gynecol* 2002; 14:387-395
2. VanSpauwen R, Seman E, O'Shea R et al. Australasian Survey of Prolapse Repair Techniques – ANZJOG, in press
3. Behnia-Willison F, Seman E, Cook J et al Laparoscopic paravaginal repair of anterior compartment prolapse. *J Minim Invasive Gynecol* 2007; 14:475-480

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Free Communications Abstracts SESSION H

'CENTRAL DISSECTION OF BLADDER'; A BLADDER DISSECTION TECHNIQUE IN CASE OF TLH FOR PATIENTS HAVING UNDERGONE PREVIOUS CAESAREAN SECTIONS

FRIDAY 28 MAY / FREE COMMUNICATIONS H
PELVIC ORGAN PROLPASE / 1521-1530

Shukla DV, Shukla SD

From 2003 to 2009, 7 years, total 104 patients had previous caesarean and required hysterectomy (TLH) for indications as adenomyosis, fibroid uterus, Endometriosis, chronic pelvic pain. 25 patients had previous 2 caesarean and 5 had previous 3 caesarean section.

Adnexal fibrosis and adhesions of bladder with cervix are usually related to number of previous caesarean section. Technique of past CS was not available for reference here in any patient.

We describe the technique for central dissection of bladder using Harmonic ace for all. (15 patients who had undergone bladder dissection by scissors are not included) Bladder dissection is initiated in centre to separate bladder from cervix by closely palpating the cervix and vaginal fornices by maryland forceps. K-90 disposable (stiff plastic catheter) catheter was used in all to define bladder limits (dome and lateral limits). Uterine manipulator was used in all with cup at top which made all vaginal fornices prominent. Bladder pillars were dissected only after central space through which anterior vaginal fornix was seen and cleared of bladder.

Blood loss during dissection was from 5cc to 50cc. Time taken for dissection was from 5min to 25min.

No uterine vessel injury or bladder injury was noted. In 2 cases bladder mucosa was exposed which was sutured by interrupted stitches.

Central dissection of bladder in case of previous caesarean patients who requires TLH is a safe alternative technique.

AUTHOR AFFILIATION: D. V. Shukla, S. D. Shukla; VIMAS, Vadodara, Gujarat, India

Free Communications Poster Abstracts

4. COMPARATIVE STUDY OF LAPAROSCOPY VS LAPAROTOMY FOR SURGICAL TREATMENT OF ENDOMETRIAL CANCER

FREE COMMUNICATIONS / POSTER PRESENTATIONS

Jin F, Martins R

OBJECTIVE: To discuss the feasibility of the laparoscopic surgical treatment of endometrial cancer and the effect of the prognosis.

METHODS: From April 1996 to September 2009, 66 endometrial cancer cases operated by laparoscopy were analyzed. 70 endometrial cancer cases treated by laparotomy during the same period were randomly selected as the control group. The perioperative clinic data and the survival rate were compared in the two groups

RESULTS: The characters before operation in both groups were similar except the age of the cases in the study group was younger than that in the control group. The mean operating time in the laparoscopy group (106minutes) was significantly shorter ($P<0.001$) than that in the laparotomy group (128minutes). The operative blood loss in the laparoscopy group (149ml) was fewer than that in the laparotomy group (237ml). The numbers of the pelvic lymph nodes resected in the two groups were similar (14.7 vs 17.0). The percentage of complications in the laparoscopy group was similar than that in the laparotomy group. The laparoscopy group had shorter hospitalization (5.6 days) than laparotomy group (8.2 days, $P<0.01$). The cases in the laparoscopy group have been mean followed-up for 17.3 months but 27.7 months in the laparotomy group ($P=0.015$). The pathological type, FIGO stage, and therapy after the operation in the two groups were similar. 1 cases had recurrence and 1 cases died in the study group and 1 case had recurrence and 2 cases died in the control group. The survival rates of the two groups were similar ($P=0.552$).

CONCLUSIONS: The patient with early endometrial cancer treated by laparoscopy is feasible and safe. The 5 – year survival was similar than that of laparotomy, but the long-time effect including side effect should be observed.

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12. LAPAROENDOSCOPIC SINGLE-SITE CLASSIC INTRAFASCIAL SUPRACERVICAL HYSTERECTOMY(CISH) IS FEASIBLE: INITIAL EXPERIENCE OF 3 CASES.

FREE COMMUNICATIONS / POSTER PRESENTATIONS

Kim JS, Nam KH

INTRODUCTION: Classic intrafascial supracervical hysterectomy is a safe procedure with a low short- and long-term complication rate. It is the procedure of choice when hysterectomy is indicated for benign disease. Potential advantages of single-port over conventional four port laparoscopy include better cosmesis from a relatively hidden umbilical scar and risk reduction of post-operative wound infection and hernia formation, elimination of multiple trocar site closures.

MATERIALS/METHOD: From January 2010 to February 2010, we have performed three cases of laparoendoscopic single-site CISH by Octo-port™ system(Dalim SurgNet, Seoul, Korea). Octo-port™ three channel system was inserted transperitoneally through a 2cm umbilical incision. All surgical procedures were performed with 30 degrees, 5mm laparoscope and conventional laparoscopic instruments. The uterus was morcellated through the port and removed with a 15mm serrated macromorcellator.

RESULTS: For 3 patients, the average age was 44.7 years(range, 38 to 53), operating room time was 131.7 minutes (range, 110 to 160), weight of the uterus was 161.7gm (range, 80 to 250), blood loss was 160mL (range, 30 to 400) and time to return to work was 6 days (range, 5 to 7). There were no operative complications. At 3 weeks of follow-up, the incisions were hidden in the umbilicus with good cosmetic benefit.

CONCLUSIONS: This new method is technically feasible, which combined with these advantages of less trauma and more cosmetic benefit and high patient satisfaction. However, additional experience and continued investigation are warranted.

REFERENCES:

1. DH Kim, ES Lee, SD Park. A safer, simpler, Classic Intrafascial Supracervical Hysterectomy Technique. JSLs(2005)9:159-162.
2. B Hamilton et al. Laparoscopic Supracervical Hysterectomy for Benign Gynecologic Conditions. JSLs(2009)13:19-21.

AUTHOR AFFILIATION: J. S. Kim, K. H. Nam; Dept. of Ob & Gyn, Soonchunhyang University Bucheon-Si, Gyunggi-Do, Republic of Korea

Free Communications Poster Abstracts

14. TEMPORAL UTERINE BLOOD FLOW ATTENUATION AND LAPAROSCOPIC CORNEAL RESECTION FOR INTERSTITIAL PREGNANCY

FREE COMMUNICATIONS / POSTER PRESENTATIONS

Kawamura H, Hoshiba T, Sasaki H, Sasakura C, Maekawa M, Hirabuki S-Y, Asamoto A

INTRODUCTION: Laparoscopic corneal resection against interstitial pregnancy is still considered as one of the most demanding laparoscopic surgery in terms of surgical skill and preparedness. In this paper, we demonstrated the benefit of temporal uterine blood flow attenuation during this procedure.

MATERIALS/METHOD: A case report from tertiary referral hospital.

PATIENT: 27-years-old woman, presented with prolonged vaginal bleeding with subacute lower abdominal pain, referred to our institution under suspicion of heterotopic pregnancy.

MAIN OUTCOME MEASURE: To preserve uterus and fertility with less invasive surgery.

RESULTS: She was hemodynamically stable. Diagnosis of interstitial pregnancy was made by pelvic magnetic resonance imaging. Rupture was unlikely based on the observation of pelvic ultrasound and MRI. As she was symptomatic, non-surgical treatment including systemic or local methotrexate was declined. Left interstitial pregnancy was confirmed by laparoscopy. Endoscopic Bulldog clamps were applied at the anastomosis between left pelvic infundibular and proper ovarian ligaments, and right pelvic infundibular ligament. Bilateral broad ligaments were fenestrated, and then uterine corpus was tourniqueted at the level of uterine isthmus by five-French rubber catheter to reduce uterine blood flow by pressing the ascending branches of uterine artery. Saline-vasopressin was infiltrated into the myometrium around the surgical site. Cornual resection was carried out using Harmonic scalpel. The myometrium was closed with single-layered running suture. Bleeding from the myometrial incision was tolerable to proceed intracorporeal suturing. Her postoperative recovery was uneventful. HCG level was resolved favorably, and ovulatory cycle was resumed approximately one month after surgery. Transvaginal ultrasound demonstrated normal myometrial and endometrial integrity without any sign of dehiscence or hematoma.

CONCLUSIONS: Temporal uterine blood flow attenuation is essential to succeed relatively time-consuming, suture-heavy laparoscopic procedure, such as corneal resection for interstitial pregnancy.

AUTHOR AFFILIATION: H. Kawamura, T. Hoshiba, H. Sasaki, C. Sasakura, M. Maekawa, S.-Y. Hirabuki, A. Asamoto; Ishikawa Prefectural Central Hospital, Kanazawa, Ishikawa, Japan

18. COMPARISON BETWEEN LAPAROSCOPIC SACRAL COLPOPEXY(LSC) AND POSTERIOR INTRAVAGINAL SLING (PIVS) FOR THE TREATMENT OF UTERINE PROLAPSE

FREE COMMUNICATIONS / POSTER PRESENTATIONS

Kim JS, Nam KH, Bae DH

INTRODUCTION: Uterine prolapse is a common problem in women with a lifetime risk of surgical repair of 11.1%. Although these are not life-threatening conditions, they do cause serious discomfort and negatively affect women's quality of life. Options in the surgical treatment of uterine prolapse encompass the abdominal and vaginal approaches. Currently there is no definitive gold standard procedure to favor a particular route in the treatment of uterine prolapse. The aim of our retrospective study was to compare operative and postoperative outcomes of LSC and PIVS for uterine prolapse.

MATERIALS/METHOD: This study was a retrospective analysis. From December 2005 to September 2009, these procedures were performed at the Department of Obstetrics and Gynecology of Soonchunhyang University, Bucheon, South Korea.

RESULTS: A total of sixteen LSC were analyzed, and compared with 21 PIVS cases. The groups did not differ significantly in parity, body mass index, stage, but in age and mean follow-up time($p=0.021$). Mean length of stay was significantly shorter for LSC patients(6.6 versus 8.9 days, $p<0.01$). The mean(SD) operative time was significantly shorter for PIVS than LSC, 183.1(45.7)minutes and 240.6(90.3) minutes respectively($p=0.002$). However, failure at the apex, defined as stage $>$ or $=$ II for point C, was seen in 14.3% of patients in the PIVS group as compared with 0% in the LSC group. These three patients(14.3%) in PIVS group were retreated with pessary. There were no operative complications between groups.

CONCLUSIONS: As compared to PIVS, laparoscopic sacral colpopexy led to shorter hospitalization and better long term results.

REFERENCES:

1. Klauschie JL, Suozzi BA, O'Brienmm, McBride AW. A comparison of laparoscopic and abdominal sacral colpopexy:objective outcome and perioperative differences. In *Urogynecol J Pelvic Floor Dysfunct.* 2009 Mar;20(3):273-9.

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Free Communications Poster Abstracts

19. SCARLESS TRANSUMBILICAL LAPAROSCOPIC OOPHORECTOMY OF A GIANT OVARIAN MASS: HYBRID USAGE OF INSTRUMENTS

FREE COMMUNICATIONS / POSTER PRESENTATIONS

Moon H-S, Lee SR

Technological innovations in the field of laparoscopic surgery have been remarkable, and the increasing need of minimally invasive procedures increases the performance of single-port laparoscopic surgery (SLPS). However, the large size of mass is still an obstacle when we performing the SLPS. Herein, 25-year-old virgin of giant ovarian mucinous cystadenoma, 38 x 24 x 21cm³ in size, successfully managed with scarless single-port transumbilical laparoscopic surgery (SPLS) by hybrid use of instruments is presented. A 12mm vertical intraumbilical skin incision was made was performed to enter the peritoneal cavity. The Alexis® wound retractor (Applied Medical) was inserted through the incision and a surgical glove was fixed to the outer ring of the wound retractor. Through holes made in fingers of the surgical glove, two 5mm trocars and a 10mm trocar were placed. The large size of the mass made laparoscopic instrument impossible to further access, so puncture and aspiration of cystic contents using a Ochsner® trocar while we manipulate the mass with a long Kelly. Through hole in the finger of the surgical glove and about 5,000 cc of mucinous fluid was drained. Drainage site of the mass was immediately grasped with the long Kelly to prevent the spillage of mucinous contents into pelvic cavity. Then unilateral oophorectomy was performed with laparoscopic instruments such as scissors and monopolar coagulator. Resected mass was placed into an isolation bag (endopouch) and pulled out of the pelvic cavity. The mass was 38 x 24 x 21cm³ in size and the cut surface of the mass was whitish-yellowish. Estimated blood loss was about 50 cc, and the operating time was 145minutes. The hybrid use of laparotomy and laparoscopic instruments made it very easy to manipulate the huge mass and it also markedly decrease the operation time.

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22. BORDERLINE MUCINOUS TUMOR ARISING IN A PARATUBAL CYST: A CASE REPORT

FREE COMMUNICATIONS / POSTER PRESENTATIONS

Lim SO, Kim JO, Jeung IC, Lee YS, Park EK

BACKGROUND: Paratubal borderline tumors (PBT) are found incidentally at frozen section or permanent pathology, and extremely rare. We describe the first case of a paratubal borderline mucinous tumor PBMT).

CASE REPORT: A 20 year-old woman was referred with a complex left adnexal mass on pelvic sonogram. She underwent a laparoscopic paratubal cyst enucleation. We used endobag for cyst extraction. Cyst rupture or tearing of endobag in laparoscopic field was absent. Frozen section analysis was reported as least borderline mucinous tumor. Currently, she is no evidence of disease recurrence after a laparoscopic fertility-sparing staging procedure.

CONCLUSION: A proper preoperative differential diagnosis of adnexal mass is difficult. So, laparoscopy needs in large or symptomatic cyst. Although growth, torsion and malignancy are rare in paratubal cysts, the possibility of tumor seeding should be excluded as use of endobag.

AUTHOR AFFILIATION: S. O. Lim¹, J. O. Kim², I. C. Jeung¹ Y. S. Lee¹ E. K. Park¹; ¹. Department of Obstetrics and Gynecology, College of Medicine, The Catholic University of Korea; ². Department of pathology, College of Medicine, The Catholic University of Korea

23. LONG-TERM OUTCOMES OF LAPAROSCOPIC COLPOSUSPENSION WITH ARCUS TENDINEUS FASCIA LATA AFTER HYSTERECTOMY FOR UTEROVAGINAL PROLAPSE

FREE COMMUNICATIONS / POSTER PRESENTATIONS

Ha JE, Lee YS, Jeung IC, Park EK

OBJECTIVE: The goal of this study was to evaluate the long-term outcomes of laparoscopic colposuspension with arcus tendineus fascia lata after hysterectomy for high-grade uterovaginal prolapse.

MATERIAL AND METHODS: We retrospectively performed chart reviews of 43 patients with uterovaginal prolapse who were performed laparoscopic colposuspension in the our university medical center from 2003 to 2009 inclusively. They had grade 3 (31patients) or grade 4 (12patients) uterovaginal prolapse.

RESULTS: The mean age was 63 years, range (39-76). The mean follow-up period was 41.2 months. 43 patients had no sign or recurrence of prolapse. Postoperative complication was tolerable and curable. Urinary frequency (2patients : 4.65%), voiding difficulty (2patients : 4.65%), nocturia (1patient : 1.32%) and vaginal spotting (1patient : 1.32%) were reported.

CONCLUSIONS: laparoscopic colposuspension using arcus tendineus fascia lata after hysterectomy could be a effective surgical option for treatment of high-grade uterovaginal prolapse.

AUTHOR AFFILIATION: J. E. Ha, Y. S. Lee, I. C. Jeung, E. K. Park; Department of Obstetrics and Gynecology, College of Medicine, The Catholic University of Korea, Korea

30. EFFICACY OF POSTOPERATIVE CYCLIC ORAL CONTRACEPTIVE USE AFTER GONADOTROPIN-RELEASING HORMONE AGONIST THERAPY FOR ENDOMETRIOMA RECURRENCE

FREE COMMUNICATIONS / POSTER PRESENTATIONS

Choi DS, Lee D-Y, Yoon B-K

INTRODUCTION: This study was performed to evaluate the efficacy of postoperative cyclic oral contraceptives (OCs) used after gonadotropin-releasing hormone agonist (GnRHa) treatment for the prevention of endometrioma recurrence

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MATERIALS/METHOD: We enrolled 362 women of reproductive age who underwent laparoscopic surgery for endometrioma in the present study. The patients were divided into two groups: GnRHa treatment only (n=187) and cyclic, low-dose, monophasic OC use after GnRHa treatment (n= 175). Endometrioma recurrence determined by pelvic ultrasound.

RESULTS: During the follow-up period (median 35.0; 12-114 months), recurrent endometriomas were detected in 67 patients (18.5%). Patients receiving cyclic OCs after GnRHa treatment exhibited a significantly reduced risk of endometrioma recurrence compared to patients treated with GnRHa alone (odds ratio=0.20; 95% CI, 0.10-0.38). The cumulative proportion of recurrence after 60 months was significantly lower in OC users than in non-users (6.1% vs. 43.3%, p<0.001), with a statistically significant difference first detected at 30 months of follow-up (p<0.05). The number of GnRHa injections (3 vs. 6 times) did not affect the recurrence rate measured up to 60 months of follow-up period in non-OC users.

CONCLUSIONS: Postoperative cyclic OC use after GnRHa treatment effectively reduces the recurrence of endometrioma.

CONFLICT OF INTEREST: none

AUTHOR AFFILIATION: D. S. Choi, D.-Y. Lee, B. – K. Yoon; Samsung Medical Center Seoul, South Korea

39. LAPAROSCOPIC INTERVENTIONS FOR NORMAL SIZED OVARIAN TORSION IN ADOLESCENT

FREE COMMUNICATIONS / POSTER PRESENTATIONS

Hirabuki S, Sasakura C, Kawamura H, Sasaki H, Hoshiba T

BACKGROUND: Adnexal torsion is a serious cause of acute abdominal pain in women. Many cases of adnexal torsion are due to ovarian pathologic tumors, however, it has been also reported that rarely normal ovary can cause torsion event. Here, we present two distinctive adolescent cases of normal sized ovarian torsion, which were managed laparoscopically, but resulted in opposite outcome.

Case 1: An 11-year-old adolescent girl presenting lower abdominal pain with nausea and vomiting was referred to our pediatric department. Pelvic plain CT scan revealed 45mm in diameter-sized ovary, however, she was observed conservatively because her symptoms were alleviating. CT scan was repeated three days later as her lower abdominal pain did not completely relieved. Enhanced CT scan was taken in this time, suggesting right adnexal torsion. Urgent laparoscopy was carried out, however, right adnectomy was inevitable because ischemic change of right adnexa was already unrecoverable.

Case 2: A 17-year-old woman was admitted with right lower abdominal pain. On ultrasound examination demonstrated a 46x29mm sized mild swelling right ovary and 29x20mm sized left ovary with small amount of ascites. Pelvic MRI revealed right adnexal ischemic changes, indicating possible adnexal torsion. Emergent laparoscopy confirmed adnexal torsion of right normal ovary, then simple detorsion was carried out. She recovered with uneventful postoperative period and was discharged on 5th postoperative day.

CONCLUSION: Torsion of normal sized ovary is not so rare particularly in juvenile women. Lack of marked ovarian pathology often causes diagnostic delay followed by permanent resection of affected ovary. Prompt diagnosis and intervention are crucial, and laparoscopic adnexal detorsion is simple and useful technique for adnexal-sparing in adolescent.

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43. LAPAROSCOPIC SIMPLE ADNEXAL DETORSION DURING PREGNANCY: A REPORT OF TWO CASES

FREE COMMUNICATIONS / POSTER PRESENTATIONS

Sasakura C, Hirabuki S, Sasaki H, Hoshiba T, Asamoto A

BACKGROUND: Adnexal torsion is considered a major cause of acute abdomen in women, particularly during pregnancy. Prompt diagnosis of adnexal torsion during pregnancy is often difficult because ovaries are relatively difficult to identify due to its dislocation by enlarged uterus. Diagnostic delay leads to profound circulatory disturbance of ovary, thus, adnectomy is inevitable, although it is not rare that the cause of ovarian enlargement is found to be functional. In this paper, we present two cases of laparoscopic adnexa-sparing procedure during pregnancy.

Case1: A 28-year-old primigravida who became pregnant through in vitro fertilization was admitted with right lower abdominal pain at 9-weeks of pregnancy. Ultrasonography revealed normal singleton fetus and enlarged hyperstimulated ovaries. Urgent laparoscopy revealed right adnexal torsion, then adnexal detorsion combined cyst aspiration was carried out. Abdominal pain was resolved immediately after detorsion, and her following pregnancy progressed uneventfully. She delivered healthy baby at term.

Case 2: A 22-year-old primigravida at 21 week of gestation was transferred our hospital from her regular clinic with severe left inguinal pain. A cystic tumor of three centimeter in diameter was found anterior to the enlarged uterus in accord to gestational age by ultrasound. Pelvic dynamic CAT scan failed to enhance the tumor, suggesting twisted ovarian tumor. Emergent laparoscopy revealed left adnexal torsion and simple detorsion was done. The ovary was enlarged only because of edematous change after torsion, and otherwise it was seemed to be intact. She was discharged on postoperative day 6, however, was returned because of recurrent torsion on postoperative day 8. Laparoscopic left adnectomy was carried out in this time. Her pregnancy continued regardlessly and she delivered healthy baby at term.

CONCLUSION: Laparoscopic adnexal detorsion is a simple but useful option for adnexal-sparing procedure during pregnancy, except it should be noted recurrent adnexal torsion is sometimes unavoidable.

AUTHOR AFFILIATION: C. Sasakura, S. Hirabuki, H. Sasaki, T. Hoshiba, A. Asamoto; Ishikawa Prefectural Central Hospital, Kanazawa City, Ishikawa Prefecture, Japan

Free Communications Poster Abstracts

46. LAPAROSCOPIC TRANSPERTIONEAL PELVIC AND PARAAORTIC LYMPHADENECTOMY IN GYNECOLOGIC MALIGNANCIES; ANALYSIS OF 520 PATIENTS AT SINGLE INSTITUTION, 1997-2006

FREE COMMUNICATIONS / POSTER PRESENTATIONS

Lim S, Nam J-H, Park J-Y, Kim Y-T, Kim Y-M, Kim J-H, Kim D-Y

INTRODUCTION: To evaluate the accuracy, feasibility and safety of laparoscopic transperitoneal pelvic and paraaortic lymphadenectomy in gynecologic malignancies.

MATERIALS/METHOD: We performed a retrospective analysis of 977 patients with early gynecologic cancer who laparoscopic (n=520) or laparotomic (n=457) pelvic and paraaortic lymphadenectomy at Asan Medical Center, Seoul, Korea from 1997 to 2006.

RESULTS: In laparoscopy group, 8 patients required conversion to laparotomy. There were no differences in the number of total (laparoscopy vs laprotomy, 31.8±13.5 vs 32.3±12.6, p=0.608), pelvic (laparoscopy vs laprotomy, 31.4±13.5 vs 30.3±11.4, p=0.148) and paraaortic (laparoscopy vs laprotomy, 5.1±4.7 vs 5.4±5.3, p=0.734) lymph nodes retrieved between the two groups. There was no significant difference in operating time and estimated blood loss between the two groups. Laparoscopy group had significantly less transfusion requirement and shorter postoperative hospital stay. The rate of perioperative complication was significantly higher in laparotomy group (12.3% vs. 19.0%, p=0.004). The rate of intraoperative complication was slightly higher in laparoscopy group (6.1% vs. 2.0%, p=0.001), but the rate of postoperative complication was higher in laparotomy group (6.3% vs. 18.6%, p<0.001).

CONCLUSIONS: Laparoscopic pelvic and paraaortic lymphadenectomy is accurate and safe procedure which is comparable to laparotomy. However, laparoscopy showed more favorable operative outcomes. Therefore, it can be a preferred method for evaluation of lymph node status in gynecologic malignancies.

AUTHOR AFFILIATION: S. Lim, J.-H. Nam, J.-Y. Park, Y.-T. Kim, Y.-M. Kim, J.-H. Kim, D.-Y. Kim; Asan Medical Center, Seoul, Korea

47. COMPARISON OF LAPAROSCOPIC AND LAPAROTOMIC SURGERY FOR BORDERLINE OVARIAN TUMOR

FREE COMMUNICATIONS / POSTER PRESENTATIONS

Park J-Y, Lim S, Nam J-H, Kim Y-T, Kim Y-M, Kim J-H, Kim D-Y

INTRODUCTION: The aim of this study was to compare the surgical and survival outcomes after surgery by laparoscopy or laparotomy for borderline ovarian tumors.

MATERIALS/METHOD: Retrospective analysis was performed on three hundred thirty six patients with borderline ovarian tumor who underwent laparoscopic or laparotomic surgical management.

RESULTS: Of 336 patients with borderline ovarian tumor, 245 patients underwent laparoscopic surgery and 91 patients underwent laparotomic surgery from 1997 to 2009. Age, parity, and body mass index was similar

between the two surgery groups. Menopausal women was more in laparoscopy group. Mean tumor size was higher in laparotomy group. FIGO stage, histologic type, bilaterality of tumor, microinvasion, micropapillary pattern, invasive implant, intraoperative tumor rupture, malignant ascites or cytology, and preoperative CA 125 level were not different between the two surgery groups. However, conservative management, use of ovarian cystectomy were more common in laparoscopy group, and comprehensive surgical staging including lymph node dissection and omentectomy were more common in laparotomy group. After mean follow-up time of 56 months (range, 3-132 months), recurrence rate (5.1% vs 4.2%, p=0.763) and death rate (1.7% vs 1.4%, p=0.864) were not different between the two surgery groups. Five year disease-free survival was 94% and 98%, respectively (p=0.8827), and 5-year overall survival rate was 98% in both groups (p=0.9643).

CONCLUSIONS: Laparoscopic surgery for borderline ovarian tumor was feasible in most cases. Although comprehensive staging procedure was less frequently used and conservative management was adopted more frequently, the survival was not compromised. Laparoscopic surgery may be a safe and reasonable alternative to laparotomic surgery in the management of borderline ovarian tumor.

AUTHOR AFFILIATION: J.-Y. Park, S. Lim, J.-H. Nam, Y.-T. Kim, Y.-M. Kim, J.-H. Kim, D.-Y. Kim; Asan Medical Center, Seoul, Korea

48. LAPAROSCOPIC MANAGEMENT OF EARLY STAGE EPITHELIAL OVARIAN AND FALLOPIAN TUBAL CANCER

FREE COMMUNICATIONS / POSTER PRESENTATIONS

Park J-Y, Lim S, Nam J-H, Kim Y-T, Kim J-H, Kim D-Y, Kim Y-M

INTRODUCTION: To compare feasibility, accuracy and safety of laparoscopy and laparotomy in surgical staging of early stage ovarian and fallopian tubal cancer.

MATERIALS/METHOD: Outcomes of patients with stage I ovarian and fallopian tubal cancer who underwent complete surgical staging at Asan Medical Center, Korea between 2004 and 2008 were retrospectively evaluated.

RESULTS: Forty patients were surgically staged through laparoscopy and 76 through laparotomy. There were no between-group differences in mean age, parity, body mass index, lymph nodes retrieved, and omentum specimen size, nor were there between-group differences in the percentage of patients who were postmenopausal, those referred for restaging, in the time interval to restaging, in those upstaged after surgery, and in those with intraoperative tumor rupture. The laparoscopy group had significantly shorter operating time (230±93min vs. 278±61min, p=0.001), less blood loss (301±217mL vs. 494±380mL, p=0.004), less transfusion requirement (15% vs. 30.3%, p=0.071), faster return of bowel movement (1.7±1.3 days vs. 3.6±1.7 days, p<0.001), and shorter postoperative hospital stay (7.9±4.7 days vs. 14.5±5.6 days, p=0.002) and time interval to adjuvant chemotherapy (12.8±4.9 days vs. 13.9±7.8 days, p<0.001). There were no postoperative complications requiring further management.

After a median follow-up time of 34 months (range, 4-63 months), 5 year disease free survival rate was 92% and 93% (P=0.876) and 5 year overall survival rate was 96% and 94% (P=0.841) for laparoscopy and laparotomy group, respectively.

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CONCLUSIONS: Laparotomy and laparoscopy showed similar surgical staging adequacy and accuracy, and laparoscopy showed more favorable operative outcomes. Laparoscopy was safe for early stage ovarian and fallopian tubal cancer.

AUTHOR AFFILIATION: J.-Y. Park, S. Lim, J.-H. Nam, Y.-T. Kim, J.-H. Kim, D.-Y. Kim, Y.-M. Kim; Asan Medical Center, Seoul, Korea

51. LAPAROSCOPIC VERSUS MINILAPAROTOMIC MYOMECTOMY FOR LARGE INTRAMURAL MYOMA

THURSDAY 27 MAY / FREE COMMUNICATIONS C
FIBROIDS / HYSTERECTOMY / HYSTEROSCOPY
1409-1418

Lee JS, Nam JH, Kim Y-T, Kim Y-M, Kim J-H, Kim D-Y, Yoo H-J, Joo WD, Park J-Y

INTRODUCTION: The aim of this study was to compare surgical outcome and postoperative recovery of patients who underwent laproscopic orminilaparotomic myomectomy for large intramural uterine myoma.

MATERIALS/METHOD: A retrospective analysis was performed on patients who underwent laparoscopic (n=108) orminilaparotomic myomectomy (n=111) for symptomatic intramural uterine myoma larger than 6cm from 2007 to 2008 as Asan Medical Center (AMC, Seoul, Korea).

RESULTS: There were no differences in age, parity and body mass index between the two groups. The mean size of the largest myoma was 6.7cm and 6.9cm for laparoscopy andminilaparotomy group, respectively (P=0.064), and the mean number of myoma was 1.3 and 1.6 for laparoscopy andminilaparotomy group, respectively (P<0.001). The mean operating time was longer in laparoscopy group (121min vs. 112min, P=0.079). The mean estimated blood loss (124mL vs. 172mL, P=0.003) and the mean perioperative hemoglobin level change (1.1gm/dL vs. 2.0gm/dL, P<0.001) was more inminilaparotomy group. However, transfusion requirement (1.9% vs. 5.4%, P=0.161) and mean transfusion volume (4.5 pints vs. 3.8 pints, P= 0.488) were not different between laparoscopy andmini-laparotomy groups. The mean postoperative hospital stay was shorter in laparoscopy group (2.3 days vs. 3.9 days, P<0.001).

CONCLUSIONS: Laparoscopic andminilaparotomic myomectomy were safe andminimally invasive surgical approach for large symptomatic intramural myoma. Laparoscopy had advantages in EBL and postoperative hospital stay, but had disadvantages in operating time.

AUTHOR AFFILIATION: J. S. Lee¹, J.-H. Nam¹, Y.-T. Kim¹, Y.-M. Kim¹, J.-H. Kim¹, D.-Y. Kim¹, H.-J. Yoo², W.-D. Joo², J.-Y. Park¹
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66. ROBOTIC-ASSISTED RADICAL TRACHELECTOMY

FREE COMMUNICATIONS / POSTER PRESENTATIONS

Choi CHC, Choi DS, Kim B-G, Bae D-S

INTRODUCTION: Radical trachelectomy is an established method to preserve fertility in early cases of cervical cancer. And it is usually performed vaginally despite the initial use of laparoscopy for the lymphadenectomy. However, this technique requires advanced vaginal surgery skills not commonly acquired.

MATERIALS/METHOD: Here we describe the surgical technique of a robot-assisted laparoscopic radical trachelectomy.

RESULTS: A 30-year-old woman, gravida 0, para 0, desiring fertility preservation was given the diagnosis of invasive squamous cell carcinoma with a tumor size of 2.5cm. The patient was treated with robotic-assisted pelvic lymphadenectomy and radical trachelectomy.

Following the dissection and transection of the parametrium, circumferential colpotomy is performed laparoscopically (robotic). Then, uterine cervix is transected transvaginally after the removal of robot docking. Cervical cerclage and vaginal closure are also performed vaginally.

CONCLUSIONS: We hope robotic-assisted radical trachelectomy will become an option for select women with early-stage cervical cancer who desire fertility preservation.

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74. OUTCOMES OF FERTILITY-SPARING RADICAL TRACHELECTOMY IN EARLY-STAGE CERVICAL CANCER

FREE COMMUNICATIONS / POSTER
PRESENTATIONS

Choi CHC, Choi DS, Kim B-G, Bae D-S

INTRODUCTION: Retrospective study was conducted to present a case series of laparoscopic radical trachelectomy (vaginal and abdominal) in early stage cervical cancer for preservation of fertility.

MATERIALS/METHOD: We performed a retrospective study who had undergone a laparoscopic trachelectomy in stage Ib1 cervical cancer patients who wanted to preserve fertility. Data regarding demographic characteristics, pathologic, surgical and survival outcomes were gathered.

RESULTS: Data of 19 patients were collected. Mean age was 32.2 years (range 24~42). Among them 13 was squamous cell carcinoma, 5 adenocarcinoma, and 1 adenosquamous cell carcinoma. Fifteen patients were nulliparous women. The mean duration of surgery was 293min (range 150~630). Mean estimated blood loss was 345 cc (range 100 - 600) and hemoglobin change (difference between post operation day one and preoperation) was 3.2 g/L (range 0.7 - 6.2). No definite perioperative complication was observed. Mean tumor size was 1.6cm (0.5~3.0). Lymphovascular space invasion was positive in 6/19(32%). Mean number of collected lymph nodes was 16 (range 6~44). Mean follow-up was estimated to be 23.5 months (range1~58). There was one recurrence case but no case of mortality. There was one successful twin delivery in 29 weeks.

CONCLUSIONS: Our data show that laparoscopic assisted radical trachelectomy is safe and recommendable choice for early cervical cancer for preservation of fertility.

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