

AGES XXII ANNUAL SCIENTIFIC MEETING 2012 in association with the APAGE REGIONAL MEETING

Minimally Invasive Gynaecology:

Idealism,
Scepticism
& Reality

FACULTY

Assoc. Prof. Jason Abbott *New South Wales* Dr Catarina Ang *Victoria*
Assoc. Prof. Rod Baber *New South Wales* Dr Mark Bowman *New South
Wales* Dr Bevan Brown *New South Wales* Dr Neil Campbell *New South Wales*
Prof. Jonathan Carter *New South Wales* Dr Felix Chan *New South Wales*
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South Wales* Dr Russell Hogg *New South Wales* Ms Sherin Jarvis *New South
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Assoc. Prof. Anusch Yazdani *Queensland*

HILTON SYDNEY AUSTRALIA 31 MAY - 2 JUNE 2012



AGES XXII ANNUAL SCIENTIFIC MEETING 2012

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AGES XXII ANNUAL SCIENTIFIC MEETING 2012

in association with the
APAGE REGIONAL MEETING

HILTON SYDNEY



Bondi Beach, Sydney



Sydney Harbour

Dear Colleagues,

On behalf of the Australasian Gynaecological Endoscopy & Surgery Society (AGES) and the Asia-Pacific Association for Gynecologic Endoscopy & Minimally Invasive Therapy (APAGE), it is our great pleasure to welcome you all to the AGES Annual Scientific Meeting XXII in conjunction with the APAGE Regional Meeting 2012. The theme of the meeting is 'Minimally Invasive Gynaecology: Idealism, Scepticism & Reality'.

AGES has consolidated its position nationally as the pre-eminent surgical society in gynaecology, and this meeting is the fifth in a series of internationally co-hosted meetings in the last 5 years. With this in mind, AGES and APAGE warmly welcome you to this important meeting here in the wonderful city of Sydney.

Invited guests from Asia will complement our Australian faculty to make the Scientific Program a very stimulating educational event. The topics covered will contain highly practical content on a broad range of areas relevant to current practice, including endometriosis, fibroids, infertility and surgery, hysteroscopic surgery, chronic pelvic pain, breast cancer and gynaecological issues, innovative endoscopic techniques, important issues at laparoscopy, and the perennial favourite – live surgery.

AGES takes great pride in fostering the next generation of gynaecological surgeons in the Australasian region. We have a number of presentations by Fellows and registrars together with many recognised leaders in their respective fields in the main part of the program, as well as in the free communication sessions.

We are delighted to be hosting this meeting with our colleagues from APAGE, and look forward greatly to their expert contribution.

We hope you enjoy this meeting which promises to be a very memorable educational and social event.

Yours sincerely,

Harry Merkur
Conference Co-Chair
Hon. Secretary AGES

Alan Lam
Conference Co-Chair
Past President AGES

Jim Tsaltas
President AGES





CONFERENCE COMMITTEE

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Membership application forms are available from the AGES website or from the AGES Secretariat.

This brochure and online registration are also available on the AGES website: www.ages.com.au

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Dr Jane Woolcock	South Australia
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AGES XXII ANNUAL SCIENTIFIC MEETING 2012

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HILTON SYDNEY

PROGRAM Thursday 31 May

Hilton Hotel Sydney Level 3 Ballroom A

0730-0750 Conference Registration
Level 3 Pre-Function Area

0750-0800 Conference Opening and Welcome
J Tsaltas, M Shiota

0800-1000 SESSION 1
Management of Stage IV Endometriosis
Sponsored by Stryker
Chairs: J Tsaltas, M Shiota

0800-0820 The surgical role of the gynaecologist
in Level IV endometriosis D Molloy

0820-0840 Colorectal surgical input and measures
of outcomes D Petersen

0840-0900 Hysterectomy – logical or illogical?
J Pardey

0900-0920 Pre- and post-operative management
of endometriosis J Koch

0920-0940 The endometrioma – appropriate surgical
management G Reid

0940-1000 Discussion

1000-1030 Morning Tea and Trade Exhibition

1030-1230 SESSION 2
Fibroids – Surgical & Non-Surgical Options
Sponsored by Stryker
Chairs: B Chern, R O'Shea

1030-1050 Conservative surgery for single and
multiple fibroids W Ledger

1050-1110 Pregnancy and fibroids N Campbell

1110-1130 Laparoscopic myomectomy and conservation
of fertility D Lok

1130-1150 Umbilical Artery Embolisation vs Magnetic
Resonance-guided Focused Ultrasound B Brown

1150-1210 Discussion

**1210-1240 THE PERPETUAL DAN O'CONNOR
LECTURE**
Chair: H Merkur
Centre of excellence for the treatment of
endometriosis: idealism, scepticism and reality
A Lam

1240-1340 Lunch and Trade Exhibition

1340-1520 SESSION 3
Infertility & Surgery
Sponsored by Karl Storz Endoscopy
Chairs: J Abbott, A Siow

1340-1400 Stage I-II excision of endometriosis –
does surgery make a difference? C Myers

1400-1420 Stage III-IV endometriosis – does surgery
make a difference for fertility? J Tsaltas

1420-1440 IVF or surgery and endometriosis M Bowman

1440-1500 Tubal surgery and fertility vs IVF A Yazdani

1500-1520 Discussion

1520-1550 Afternoon Tea and Trade Exhibition

1550-1730 SESSION 4
**Hysteroscopic Management of
Menorrhagia**
Sponsored by Johnson & Johnson Medical
Chairs: A Yazdani, H Merkur

1550-1610 Endometrial ablation – here today,
gone tomorrow? J Abbott

1610-1630 Effect on hysterectomy rates – real or imaginary
J Chow

1630-1650 Polyps in the menopause – over treated
or removal essential H R Won

1650-1710 New methods for submucous fibroids C Ang

1710-1720 Discussion

1720-1800 AGES ANNUAL GENERAL MEETING
Level 3 Ballroom A

1800-1900 Welcome Cocktail Reception
Level 3 Pre-Function Area



PROGRAM Friday 1 June

Hilton Hotel Sydney Level 3 Ballroom A

0700-0750 Breakfast Symposium:
'Breakfast with the Stars'
Sponsored by Stryker
Conference speakers lead discussions on specific topics

0800-1000 SESSION 5
Chronic Pelvic Pain
Sponsored by Olympus
Chairs M McEvoy, K Jansen

0800-0820 Chronic pelvic pain S Evans

0820-0840 Management of pudendal neuralgia T Vancaille

0840-0900 Pelvic pain and pelvic floor muscle overactivity S Jarvis

0900-0920 Bladder pain syndromes J Woolcock

0920-1000 Discussion

1000-1030 Morning Tea and Trade Exhibition

1030-1230 SESSION 6
Breast Cancer & Gynaecological Issues
Sponsored by Karl Storz Endoscopy
Chairs: S Salfinger, K Harrison

1030-1050 Breast cancer update J French

1050-1110 HRT in breast cancer survivors R Baber

1110-1130 Recent developments in ovarian cancer diagnosis and treatment J Carter

1130-1150 Endometrial pathology in patients with breast cancer R Hogg

1150-1230 Discussion

1230-1300 PLENARY LECTURE
Chair: R O'Shea
Fertility reserve in müllerian anomalies C L Lee

1300-1400 Lunch and Trade Exhibition

1400-1530 SESSION 7
Live Surgery
Sponsored by Stryker
Transmitted from Norwest Private Hospital
Moderators: J Tsaltas, J Abbott, G Cario
Surgeons: H Merkur, J Pardey

Hysterectomy and previous caesarean section
Hysterectomy and endometriosis
Hysterectomy and fibroids

1530-1600 Afternoon Tea and Trade exhibition

ATTENDANCE POINTS

CONFERENCE

Full attendance Thursday 31 May, Friday 1 June and Saturday 2 June	23 CPD points
Thursday 31 May only	9 CPD points
Friday 1 June only	10 CPD points
Saturday 2 June only	5 CPD points

Attendance by eligible RANZCOG Members will only be acknowledged following signature of the attendance roll each day of the Conference, and for each workshop.

PR&CRM POINTS

The RANZCOG Clinical Risk Management Activity Reflection Worksheet (provided in the Conference satchel) can be used by Fellows who wish to follow up on a meeting or workshop that they have attended to obtain PR&CRM points.

This worksheet enables you to demonstrate that you have reflected on and reviewed your practice as a result of attending a particular workshop or meeting.

It also provides you with the opportunity to outline any follow-up work undertaken and to comment on plans to re-evaluate any changes made.

Fellows of this College who attend the Meeting and complete the Clinical Risk Management Activity Reflection Worksheet in accordance with the instructions thereon can claim for an additional 5 PR&CRM points for the Meeting and for each of the Workshops. For further information, please contact the College.

PROGRAM Friday 1 June

1600-1730 SESSION 8

Free Communications A

Level 3 Ballroom A

Sponsored by Stryker

Chairs: A Yazdani, M Shiota

- 1600-1610 Report on AGES/Covidien Travelling Fellowship 2011 Bedford N
- 1610-1620 An established Endogynaecological Unit's retrospective analysis of caseload and complications Cebola M, Choi S, Cario G, Rosen D, Chou D, Reyftman L, de Rosnay L, Baghraf O
- 1620-1630 Laparoscopic resection of accessory uterine cavity Francis C, Miligkos D, Behrens R, Louden K
- 1630-1640 Bladder dysfunction following laparoscopic gynaecological surgery with or without ADEPT anti-adhesion solution Nesbitt-Hawes E; Zhang C, Won HR, Law K, Abbott J
- 1640-1650 Large retroperitoneal (presacral) haematoma following posterior vaginal wall repair – a case report and video footage of laparoscopic management de Rosnay P, Rosen D, Cario G, Chou D, Reyftmann L, Choi S, Baghraf O
- 1650-1700 Ureteric endometriosis causing hydronephrosis managed by laparoscopic segmental resection and primary spatulated uretero-uretero anastomosis Choi S, Cario G, Rosen D, Reyftmann L, De Rosnay P, Baghraf O, Testa G, Chou D
- 1700-1710 Complete Androgen Insensitivity Syndrome presenting as primary amenorrhoea, medical and surgical management considerations Talmor A, Tsaltas J, Lawrence A, Vollenhoven B
- 1710-1720 Pelvic Inflammation associated with the use of FloSeal Hemostatic Matrix in gynaecological laparoscopic surgery Chan A, Ghosh B, Chang T
- 1720-1730 Laparoscopic hemihysterectomy for a rare genitourinary malformation Patel PS, Lam A

1600-1730 Free Communications B

Level 4 Room 1

Sponsored by Karl Storz Endoscopy

Chairs: McEvoy, B Chern

- 1600-1610 Monash Medical Centre Gynaecological Endoscopy Unit: how our multidisciplinary Endometriosis Clinic works and how we train our fellows Druitt M, Digby A, Najjar H, Tsaltas J, Vollenhoven B
- 1610-1620 Does nerve sparing excisional surgery for endometriosis reduce the future risk of pelvic floor dysfunction? Flemming T, Krishnan S
- 1620-1630 Presumed Nasal Endometriosis as a cause of menstrual epistaxis: second case report in the peer reviewed literature (umpteenth on Google)? Druitt M, Tsaltas J
- 1630-1640 A multidisciplinary approach for complicated deep infiltrating endometriosis Patel PS, Pillinger S, Vass J, Lam A
- 1640-1650 Laparoscopic segmental bowel resection for colorectal endometriosis Patel PS, Evans J, Pillinger S, Perera S, Lam A
- 1650-1700 Can we predict pouch of Douglas obliteration using a new real-time ultrasound technique: the 'sliding sign' Reid S, Lu C, Casikar I, Reid G, Abbott J, Cario G, Chou D, Kowalski D, Cooper M, Condous G
- 1700-1710 The prediction of pouch of Douglas obliteration using off-line analysis of the TVS 'sliding sign': diagnostic accuracy and inter-observer agreement Reid S, Lu C, Casikar I, Mein B, Ludlow J, Magotti R, Benzie R, Condous G
- 1710-1720 Intra-observer agreement in the prediction of pouch of Douglas obliteration using 2-D off-line analysis of the TVS 'sliding sign' Reid S, Lu C, Casikar I, Mein B, Magotti R, Ludlow J, Benzie R, Condous G
- 1720-1730 What are the surgical findings associated with pouch of Douglas obliteration at laparoscopy in women with suspected endometriosis? Reid S, Lu C, Casikar I, Reid G, Abbott J, Cario G, Chou D, Kowalski D, Cooper M, Condous G



PROGRAM Friday 1 June

1600-1730 Free Communications C

Level 4 Room 2

Sponsored by Olympus

Chairs: R O'Shea, A Siow

- 1600-1610 Coexistence of endometriosis in women with symptomatic fibroids Patel PS, Lam A
- 1610-1620 Laparoscopic myomectomy: a single centre's experience Patel PS, Lam A
- 1620-1630 Office sonovaginography: redefining the concept of a normal pelvis on transvaginal ultrasound in women with suspected endometriosis Reid S, Casikar I, Reid G, Abbott J, Cario G, Chou D, Kowalski D, Cooper M, Condous G
- 1630-1640 Clinical outcomes after laparoscopic myomectomy: A retrospective analysis Burton AE, Lyons SD
- 1640-1650 Novasure endometrial ablation system – an audit of safety, effectiveness and patient satisfaction Francis C, Behrens R, Loudon K.
- 1650-1700 Laparoscopic myomectomy for fibroids that protrude in and out Choi S, Cario G, Rosen D, Reyftmann L, De Rosnay P, Baghlaf O, Chou D.
- 1700-1710 The incidence of endometrial malignancies in patients attending outpatient hysteroscopy in Western Australia: prevalence and risk factors Lee H, Beard A, Karthigasu K, McElhinney B, Hart R
- 1710-1720 Fimbrial extrusion of endotubal isthmic plugs captured on video Lee S, Soo S, Ang C
- 1600-1730 Free Communications D**
Level 4 Room 3/4
Sponsored by Johnson & Johnson Medical
Chairs: S Salfinger, G Cario
- 1600-1610 Report on AGES/Covidien Travelling Fellowship 2009 Wang L
- 1610-1620 Laparoscopic assisted minilaparotomy hysterectomy for huge posterior lower segment fibroid causing bilateral ureteric obstruction resulting in acute renal failure in a 30 year-old nulliparous lady Choi S, Cario G, Rosen D, Reyftmann L, De Rosnay P, Baghlaf O, Condous G, Brown M, Chou D
- 1620-1630 Malignant peritoneal mesothelioma: an unexpected finding Smith CJ, Chow JSW, Merkur H, Hardas G, Hogg R
- 1630-1640 Laparoscopic staging of borderline tumours (with transvaginal appendicectomy) Acton J, Salfinger S
- 1640-1650 Complications of laparoscopic hysterectomy: the Monash Experience (data from 2008 – 2012) Myers C, Tsaltas J, Lawrence A, Pearce S, Najjar H, Dr Weng Chan KW, Wang L
- 1650-1700 Endometriosis mimicking ovarian malignancy: a case report Patel PS, Lam A
- 1700-1710 Unsuspected uterine leiomyosarcoma: two case reports Patel PS, Lam A
- 1710-1720 The conundrum of the large ovarian cyst: What is the best management? Smith CJ, Lyons SD
- 1720-1730 Laparoscopic hysterectomy, implications of port size Acton J, Salfinger S



PROGRAM Friday 1 June

1600-1730 Free Communications E

Level 2 Rooms 5/6

Sponsored by Stryker

Chairs: K Harrison, G Reid

1600-1610 Report on AGES/Covidien Travelling Fellowship
 2008: A slice of France at IRCAD Kroon B

1610-1620 Laparoscopic repair of vaginal vault dehiscence
 found incidentally during laparoscopy for
 suspected pelvic abscess (post total laparoscopic
 hysterectomy) Cario G, Rosen D, Chou D,
 Reyftmann L, de Rosnay P, Choi C, Baghraf O

1620-1630 Pinnacle® Anterior/Apical Pelvic Floor Repair
 Kit: Initial experience at the Sydney Women's
 Endosurgery Centre Cario G, Rosen D, Chou D,
 Reyftmann L, de Rosnay P, Choi S, Baghraf O.

1630-1640 Laparoscopic Mesh Sacrocolpopexy in
 combination with Anterior Elevate vaginal mesh
 repair for a very large complete procidentia in a
 patient with bladder exstrophy Chou D, Choi S,
 de Rosnay P, Cario G, Rosen D,
 Reyftmann L, Baghraf O

1640-1650 Laparoscopic paravaginal repair – dilemmas
 with analysis of follow-up data >5 years
O'Shea R, Bedford N, Seman E,
 Behnia-Willison F, Kierse M

1650-1700 Laparoscopic global pelvic floor repair:
 laparoscopic total hysterectomy, sacrocolpopexy,
 paravaginal repair and colposuspension Chou D,
Reyftmann L, Cario G, Rosen D,
 Choi S, de Rosnay P, Baghraf O

1700-1710 Surveillance cystoscopy in pelvic floor repair –
 is it worth the trouble? Francis C, O'Shea R,
 Bedford N, Seman E, Benia-Willison F

1710-1720 An unusual case of severe uterovaginal and
 rectal prolapse in a 22 year-old woman
Patel PS, Schnitzler M, Lam A

1600-1730 Free Communications F

Level 2 Room 2

Sponsored by Johnson & Johnson Medical

Chairs: M Healey, S Lyons

1600-1610 Report on AGES Travelling Fellowship 2011:
 Robotic Surgery Law K

1610-1620 Skepticism of de-torting large ovaries
 Georgiou C

1620-1630 The effect of heated humidified carbon dioxide
 on post-operative pain and recovery times in
 patients undergoing laparoscopic surgery of
 duration greater than 90 minutes. A randomised
 controlled trial Ellett L, Jagasia N, McIlwaine K,
 Cameron M, Readman E, Maher P

1630-1640 Realities of operating Georgiou C

1640-1650 Laparoendoscopic Single Site Surgery (LESS) in
 gynaecology is feasible: a single surgeon's initial
 experience with 100 cases Lekskul N, Siow A,
 Lao S, Abdullah A, Chern B

1650-1700 Have you seen my threads? Georgiou C

1700-1710 Overcoming side-docking in gynaecologic
 robotic surgery with the da Vinci Standard
 System: a KK Hospital experience Mohd J,
Lekskul N, Chern B

1710-1720 A single blind randomised controlled trial of
 surgical and patient outcomes using mechanical
 bowel preparation before laparoscopic
 gynaecological surgery Won HR, Maley P,
 Salim S, Rao A, Neil T, Campbell NT, Abbott JA

1720-1730 Tuberculosis salpingitis diagnosed during
 laparoscopy Choi S, Cario G, Chou D,
 Reyftmann L, de Rosnay P, Baghraf O, Rosen D

Gala Dinner
 1900 for 1930

COAST
 The Roof Terrace
 Cockle Bay Wharf
 Darling Harbour





PROGRAM Saturday 2 June

Hilton Hotel Sydney Level 3 Ballroom A

0800-1000 SESSION 9

Innovative Endoscopic Techniques

Sponsored by Karl Storz Endoscopy

Chairs: A Rosamilia, A Rane

- 0800-0820 Laparoscopy in children and adolescents
R Deans
- 0820-0840 Ergonomics of single port laparoscopic surgery
A Siow
- 0840-0900 New technologies, old dangers...
Capacitive coupling and friends
S Lyons
- 0900-0920 The state of the art of fetoscopy
A Welsh
- 0920-0940 Appraisal of robotic surgery for hysterectomy
B Chern
- 0940-1000 Discussion

1000-1030 PLENARY LECTURE

Chair: A Lam

Recurrence of uterine myoma after laparoscopic myomectomy - what are the risk factors?

M Shiota

1030-1100 Morning Tea and Trade Exhibition

1100-1300 SESSION 10

Important Issues at Laparoscopy

Sponsored by Stryker

Chairs: J Tsaltas, B Chern

- 1100-1120 Ectopic Pregnancy : Preparing for emergencies
and unusual scenarios
C K Khoo
- 1120-1140 Place of laparoscopy in the large ovarian tumour
F Chan
- 1140-1200 Cancer of the ovary and laparoscopic surgery
S Salfinger
- 1200-1220 What is the future for robotics in Australasia?
S Valmadre
- 1220-1240 Laparoscopy in pregnancy: Is it the
best approach?
C Smith
- 1240-1300 Discussion
- 1300-1315 Awards and close
J Tsaltas, H Merkur

AGES AWARDS

John Kerin Award for Best Free Communication
sponsored by Covidien

Best Registrar Presentation
sponsored by Johnson & Johnson Medical

Best Free Communication
sponsored by Karl Storz Endoscopy

Best Video Presentation
sponsored by B. Braun

Best Poster Presentation
sponsored by AGES

The Memorial Professor Tony McCartney
AGES Travelling Fellowship

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Travelling Fellowship



PROGRAM ABSTRACTS Thursday 31 May

Session 1 / 0800-0820

THE SURGICAL ROLE OF THE GYNAECOLOGIST IN LEVEL IV ENDOMETRIOSIS

Molloy D

The role of the gynaecologist in the management of Level IV endometriosis is first and foremost that of lead carer. Endometriosis is a gynaecological disease which has a number of modalities of treatment, the most challenging of which is surgery. Hormonal therapy and pain management are other arms of treatment. The gynaecologist is therefore not only usually the lead surgeon but is the treatment coordinator who must involve other surgical specialties as required but also coordinate adjuvant therapy for long term management of the patient. The prime aim of the surgery is disease clearance or minimisation. Clearance may only be possible by the use of Laparoscopic hysterectomy and endometriosis resection. Laparoscopic Endometriosis resection without hysterectomy is frequently the most appropriate operation for many patients seeking future fertility options but simultaneous hysterectomy affords the opportunity to clear deep parametrial disease which is otherwise often remains as a residual well of disease requiring other methods of treatment or, frequently recurrence. Optimally Level IV endometriosis gynaecological surgeons will have a skill set which includes basic urological surgery and bowel repair.

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

Session 1 / 0820-0840

COLORECTAL SURGICAL INPUT AND MEASURES OF OUTCOMES

Petersen D

Stage IV Endometriosis surgery can be complex and challenging for the Gynaecologist and Colorectal Surgeon alike. Pre-operative investigations are best directed to excluding specific colorectal conditions (cancers or inflammatory bowel disease). Techniques for surgical management include local excision, endoluminal stapled disc excision and formal rectal resection. Concomitant resections are often required. Specimen extraction sites are dependent on the nature of gynaecological surgery and may include transvaginal specimen extraction. Outcome measures in the literature reflect gynaecological outcomes rather than functional colonic studies.

AUTHOR AFFILIATION: Dr Damien Petersen; Royal Brisbane and Women's Hospital, Herston, Queensland, Australia. St Andrew's War Memorial Hospital, Spring Hill, Queensland, Australia.

Session 1 / 0840-0900

HYSTERECTOMY - LOGICAL OR ILLOGICAL?

Pardey J

There is a high recurrence rate of pain after surgery for painful endometriosis. The literature on the role of hysterectomy is conflicting and inconsistent. "Endometriosis may be unique among benign diseases that it is frequently treated surgically by the removal of something else". Surgical approaches are not standardised, post operative treatment varies and research is mostly retrospective. Thus there are no universally accepted guidelines on best management. The presentation will try to work to a clinically useful decision aid to help treatment decisions.

AUTHOR AFFILIATION: Dr John Pardey; Clinical Director of O&G for Nepean / Blue Mountains Local Health District, New South Wales, Australia.

Session 1 / 0900-0920

PRE- AND POST-OPERATIVE MANAGEMENT OF ENDOMETRIOSIS

Koch J

Juliette will discuss the pathophysiology of endometriosis and the mechanisms by which medical treatments work. She will outline the results of a Cochrane review on pre- and post-operative management and the relevant studies on the impact of the Levonorgestrel IUD. The role of acupuncture will be discussed and the role of novel treatments such as statins and SERMS will be explored in this review.

AUTHOR AFFILIATION: Dr Juliette Koch; Conjoint Lecturer at The University of New South Wales, Kensington, New South Wales, Australia. IVF Australia. Prince of Wales Private Hospital, Randwick, New South Wales, Australia.

Session 1 / 0920-0940

THE ENDOMETRIOMA - APPROPRIATE SURGICAL MANAGEMENT

Reid G

The surgical management of ovarian endometriosis has been discussed extensively in many forums for many years. There has been general consensus of opinion that excisional surgery is the preferred approach, to optimise subsequent natural fertility and to minimise recurrence.



PROGRAM ABSTRACTS Thursday 31 May

In this presentation I wish to focus on endometriomas and fertility. Endoscopic surgeons have historically removed endometriomas to improve spontaneous fertility, resorting to Assisted Reproductive Technologies (ART) when pregnancy did not occur. Fertility specialists have tended to move more quickly to ART, considering surgery only when pregnancy did not occur.

I believe that two developments in the last 5 years should change the way we manage patients.

The first of these is the development of an anti-müllerian hormone assay, a robust and reliable measure of ovarian reserve. The second is the development of oocyte and embryo vitrification.

I will present current data on the status of ovarian reserve in patients with ovarian endometriosis – both pre-operatively and post-operatively. Use of this data should determine the optimal management of our patients for whom fertility preservation is of major concern.

Outcomes following vitrification of both oocytes and embryos will also be considered, as part of overall management planning.

Perhaps it is time to develop a new management algorithm for these challenging patients.

AUTHOR AFFILIATION: Dr Geoffrey Reid; Director of Gynaecological Endoscopy at Liverpool Hospital, New South Wales, Australia. University of New South Wales, Kensington, New South Wales, Australia. Sydney IVF, St Luke's Hospital, St George Private Hospital and the Southern Highlands Private Hospital, New South Wales, Australia.

Session 2 / 1030-1050 CONSERVATIVE SURGERY FOR SINGLE AND MULTIPLE FIBROIDS

Ledger W

Fibroids are the most common tumours of smooth muscle. They occur commonly in women in the later part of their reproductive lives and have many clinic sequelae. For many years open myomectomy was treatment of choice for women with fibroids wishing to preserve fertility. More recently, technological advancement has facilitated laparoscopic myomectomy for increasingly large and difficult to access fibroids. Pregnancy rates following laparoscopic myomectomy remain fairly low, however a number of different treatment modalities, both medical and minimally invasive, have been developed as alternatives over the last decade.

Whilst medical management of fibroids may be clinically useful for women who do not wish pregnancy, these approaches are invariably contraceptive and are therefore not recommended for those wishing to conceive. Minimally invasive alternatives to myomectomy include; uterine artery embolisation, magnetic resonance imaging guided focused ultrasound and radio frequency ablation. While these techniques are promising, data from well conducted adequately powered randomised control trials are lacking and the majority of evidence derives from case series and from single centres. However, the evidence base is growing. This will be reviewed followed by recommendations for current "best practice".

AUTHOR AFFILIATION: Professor William Ledger; University of New South Wales, Royal Hospital for Women, Randwick, New South Wales, Australia.

Session 2 / 1050-1110 PREGNANCY AND FIBROIDS

Campbell N

This presentation aims to run through the three trimesters of pregnancy, the pre-conception period and the postnatal period. At each of these stages the potential issues of fibroids and their impact on pregnancy will be discussed. In the pre-conception period the issues of uterine scarring after myomectomy and its impact on placental implantation and uterine rupture in pregnancy will be considered. During the first trimester of pregnancy the potential for pain, urinary retention and miscarriage will be discussed. In the second trimester, issues of placental implantation will be the main focus. The third trimester will discuss issues of fetal malpresentation, dystocia / obstructed labour, fibroid degeneration and then the delivery issues focusing on haemorrhage, the potential for myomectomy and hysterectomy.

AUTHOR AFFILIATION: Dr Neil Campbell; Royal Prince Alfred Hospital, Camperdown, New South Wales, Australia.

PROGRAM Thursday 31 May

Session 2 / 1110-1130

LAPAROSCOPIC MYOMECTOMY AND CONSERVATION OF FERTILITY

Lok D

There are increasing evidences that the presence of uterine fibroids, including those non-cavity distorting intramural fibroids, have negative impacts on nature fertility, fertility treatment outcomes and risks of miscarriages. While there are abundant observational studies showing benefits of myomectomy on subsequent reproductive outcomes, evidences from randomised studies are scant and are difficult to obtain. Intervention in such situation would need to be justified on individual basis on balance of benefits and risks. Endoscopic compared to open myomectomy may tilt such balance in favour of intervention. Endoscopic approach fulfils many of the microsurgical principles which are important in reproductive surgeries, and provides additional minimally invasive surgery benefits, allows the ultimate microsurgical approach to myomectomy in selected cases.

AUTHOR AFFILIATION: Dr Derek Lok; University of Sydney, University of New South Wales, Liverpool Hospital, Westmead Hospital, Royal Prince Alfred Hospital, New South Wales, Australia.

Session 2 / 1130-1150

UMBILICAL ARTERY EMBOLISATION VS. MAGNETIC RESONANCE-GUIDED FOCUSED ULTRASOUND

Brown B

Of around 600,000 hysterectomies performed annually in the United States, around 40% are performed for fibroid disease. Hysterectomy is a highly morbid surgical procedure, requiring the use of expensive hospital resources, and requiring extensive recuperation. In removing a major organ it impacts on areas such as fertility, sexuality, and perceptions of femininity. Novel, non-extirpative methods of definitively treating fibroid disease are now available which do not suffer the disadvantages of hysterectomy. To date these have not been widely used in Australia. This presentation explores two of these methods.

AFFILIATION: Dr Bevan Brown; VMO, Sydney Adventist Hospital, Wahroonga, New South Wales, Australia. VMO, Norwest Private Hospital, Bella Vista, New South Wales, Australia.

The Perpetual Dan O'Connor Lecture / 1210-1240

CENTRE OF EXCELLENCE FOR THE TREATMENT OF ENDOMETRIOSIS: IDEALISM, SCEPTICISM AND REALITY

Lam A

In recent time the concept of centres of excellence (CoE) has been promulgated as the ideal way to deliver evidence-based, cost-efficient treatment for women suffering from endometriosis. Proponents of the concept have argued that CoE would deliver individualised patient-focused, cost-effective endometriosis management by facilitating appropriate assessment and correct diagnosis as well as by reducing the time delay in the delivery of individualised care and the hit-and-miss treatments and expensive fertility treatments (D'Hooge 2006).

In general, CoE should include gynaecologists, multi-disciplinary surgical team including urologists, GIT surgeons, pain specialists, nurse educators and allied health professionals such as physiotherapist, psychologists, and dieticians. Additionally, CoE should aim to encourage clinical research and specialist surgical training to the highest standard.

While the idea of CoE is a noble concept, current treatment outcomes may leave both health professionals and patients sceptical and disappointed due to false expectations of 'Excellence'. One study which looked at long-term follow-up after excision of endometriosis reported up to 36% risk of requiring further surgery after 5 years (Abbott 2003). Similarly, after surgical excision of recto-vaginal endometriosis, another study found cumulative rates of pain recurrence, clinical or sonographic recurrence, and new treatment of 28, 34, and 27% respectively (Fedele 2004). Additionally, surgical excision for deep endometriosis carries potential morbidity with one large series reported 2% chance of intra-operative and 13.9% incidence of postoperative complications in (Kondo 2010).

In this presentation, CARE data will be presented to compare our centre outcomes against those published in the literature. In so doing, we aim to clearly inform all women who seek treatment for endometriosis of all available treatment options, risks and benefits, and of realistic expected outcomes. Similarly, any institutions which wish to become centres of excellence should undergo a vigorous process of accreditation, and be prepared to publicise their outcomes including success and complication rates, and participate in clinical research and promote surgical training for those who wish to become proficient.

AUTHOR AFFILIATION: Associate Professor Alan Lam; Centre for Advanced Reproductive Endosurgery (CARE), St Leonards, New South Wales, Australia. Royal North Shore Hospital and North Shore Private Hospital, St Leonards, Mater Hospitals, North Sydney, New South Wales, Australia.



PROGRAM ABSTRACTS Thursday 31 May

Session 3 / 1340-1400

STAGE I-II EXCISION OF ENDOMETRIOSIS - DOES SURGERY MAKE A DIFFERENCE?

Myers C

Endometriosis is a common, chronic and oestrogen dependant condition. It is associated with both infertility and pelvic pain. Despite many different staging systems being proposed the r-AFS score is still the most commonly used. Stage I-II is minimal to mild endometriosis (1985).

The association between infertility and endometriosis is still poorly understood. There are a number of studies that show an association. D'Hooghe 2003 showed that there was an increased prevalence of endometriosis in subfertile populations compared with women of proven fertility. However there has never been a proven causal link between endometriosis and infertility. Despite this it has long been hypothesised that removing endometriosis in those with infertility will improve pregnancy rates.

There are two important randomised controlled trials looking at pregnancy rates in subfertile women following removal of min-mild endometriosis. Marcoux et al (1997) randomised 341 women to either diagnostic laparoscopy or laparoscopy and treatment of endometriosis. They showed that in the removal of endometriosis arm the pregnancy rate was 36.6% compared with 21.9% on the diagnostic laparoscopy alone group. (OR 2.06 CI 1.28 - 3.33). The other RCT examining this question (Parazzini 1999) showed no difference between the operative and the diagnostic group (19.6% vs. 22.2%, OR 0.75 CI 0.3 - 1.85).

These studies were the subject of a Cochrane meta analysis which, when pooled, showed an overall positive effect on pregnancy rates in the operative group - OR 1.65 (95% CI, 1.06 - 2.58). Jacobson 2002.

The guidelines from the major organisations and bodies (ARSM 2006, ESHRE 2005, RCOG 2006) all recommend, albeit cautiously, surgery for min-mild endometriosis to improve fertility.

Vercellini (2009) published a very thorough review of the literature relating to infertility, surgery and endometriosis. He does further analysis on the numbers from the two trials and shows that in order to achieve one extra pregnancy we must remove endometriosis in 12 patients. He also points out that in fact as it is not possible to identify who has endometriosis pre-op we must operate on 24-36 patients to achieve one pregnancy.

Vercellini's review highlights the fact that there needs to be wide consideration of all factors. Surgery has risks and benefits apart from its possible effect on infertility. There are well know complications relating to surgery but it can also address other issues, including pain and provide a diagnosis. There must be a careful case-by-case examination of each patient with all the factors reviewed.

There is, however, no doubt from the literature that treating minimal to mild endometriosis surgically improves pregnancy rates. The consensus from the Monash Endosurgical Unit is that in women less than 36 years old, surgery should be performed prior to referral to the reproductive biology unit.

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AUTHOR AFFILIATION: Dr Clare Myers; Monash Medical Centre, Clayton, Victoria, Australia.

PROGRAM ABSTRACTS Thursday 31 May

Session 3 / 1420-1440

IVF OR SURGERY FOR ENDOMETRIOSIS

Bowman M

Endometriosis has a known impact upon fertility, at the level of oocyte function, fertilisation and implantation. Both the surgical excision of endometriosis, and assisted conception, are known to lead to successful pregnancies for those patients with endometriosis and infertility. In choosing the most appropriate modality for an individual patient, the following should be considered:

- Endometriosis is a very broad-spectrum disease and in fact might be incidental to fertility in some cases
- Some variants of endometriosis might exert their effect on fertility, for example, more exclusively at the level of oocyte function or alternatively at an endometrial level. As a result assisted conception and surgery may have different returns for different patients
- Multi-disciplinary management should not be mutually exclusive
- Like any intervention to improve fertility, if the surgical treatment of endometriosis, or assisted conception, is destined to be successful, it will likely be declared so within a relatively short time frame
- The length of time a couple have been attempting conception, the age of the woman, her ovarian reserve and the presence or absence of other fertility factors all have an important bearing on outcomes. These must be factored both into any decision making and also into any statistical review of outcomes.

This talk will aim to review the relative contributions of surgery and IVF in the treatment of this disease.

AUTHOR AFFILIATION: Associate Professor Mark. Bowman; Medical Director, Genea, Sydney, New South Wales, Australia. University of Sydney, New South Wales, Australia. Royal Prince Alfred Hospital, Sydney, New South Wales, Australia.

Session 4 / 1550-1610

ENDOMETRIAL ABLATION: HERE TODAY, GONE TOMORROW?

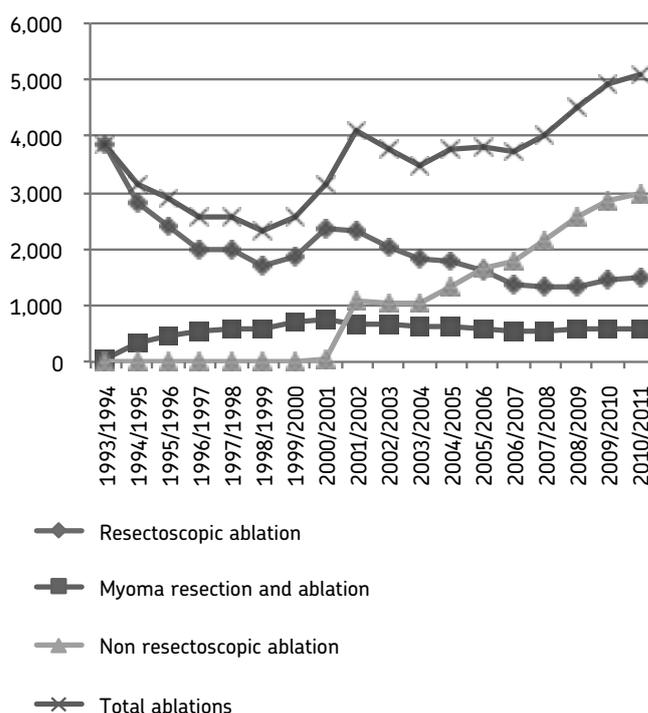
Abbott J

Endometrial ablation was first described more than 80 years ago, using a blind technique to destroy the endometrium. Resurgence occurred in the 1970s and 80s when hysteroscopically controlled techniques were described and large series reported in the literature. At least 6 RCT's comparing endometrial ablation and hysterectomy show a cost advantage to endometrial ablation with high satisfaction rates and good quality

of life outcomes. Complications from fluid absorption, the need for a high degree of technical skill and anaesthetic requirements resulted in the development of a wide variety of device driven ablation systems, many blind using thermal, cryo or microwave energy to destroy the endometrium and treat abnormal uterine bleeding (AUB). Most of these can be used in an outpatient or office setting under local anaesthesia and this is common overseas but not in Australia due to reimbursement, political and surgeon factors.

Data show that overall the total number of ablation procedures is increasing (see graph below), although the method of ablation is changing with non-resectoscopic techniques becoming the primary mode for undertaking ablation. There has been a steady increase in the number of ablation procedures per capita with 16/100,000 in 1995 to 24/100,000 in 2011. Not all ablation procedures are currently available in Australia such as cryoablation and hydrothermoablation and others have been introduced but withdrawn from commercial sale such as microwave ablation. With a strong evidence base for clinical efficacy, improvement for women's quality of life and as an alternative to hysterectomy, endometrial ablation not only looks as though it is here today, it seems it is here to stay.

AUTHOR AFFILIATION: Associate Professor Jason Abbott Med (Hons), FRANZCOG, FRCOG, PhD; University of New South Wales, Sydney, New South Wales, Australia.





PROGRAM ABSTRACTS Thursday 31 May

Session 4 / 1610-1630

EFFECT ON HYSTERECTOMY RATES - REAL OR IMAGINARY

Chow JSW

The NICE guidelines state: "hysterectomy should not be used as a first-line treatment solely for heavy menstrual bleeding"¹.

Menstrual disorders and fibroids are the most frequent indications for hysterectomy in Australia and the USA^{2,3}. Although overall hysterectomy rates have fallen in Australia² during the last decade, patterns in the rate of hysterectomy for menstrual disorders are less apparent. Western Australian data indicate that hysterectomy rates for menstrual disorders are stable whilst hysterectomy rates for fibroids have increased⁴.

In the last decade there has also been a small increase in the number of endometrial ablation procedures undertaken in Australia, whilst the number of hysteroscopic myomectomy procedures is static⁵.

A review of the literature regarding hysterectomy rates and the risk factors for hysterectomy after endometrial ablation and hysteroscopic treatments for abnormal menstrual bleeding is presented. The value of hysterectomy rates as a measure of women's reproductive health will also be discussed.

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6. AUTHOR AFFILIATION: Dr Jason S. W. Chow; Sydney West Advanced Pelvic Surgery Unit, Australia. University of Western Sydney, Australia.

Session 4 / 1630-1650

POLYPS IN MENOPAUSE - OVER TREATED OR IS REMOVAL ESSENTIAL?

Won H

Endometrial polyps are a common gynaecologic condition that are associated with clinical symptoms such as abnormal vaginal bleeding and infertility, as well as premalignant and malignant conditions. The prevalence of polyps increase with age and it is reported that more postmenopausal women than premenopausal women are affected.

This presentation will present the summary of literature on the epidemiology, clinical presentation, diagnostic investigations, and management of endometrial polyps in postmenopausal women compared to premenopausal women.

AUTHOR AFFILIATION: Dr HaRyun Won; Royal Hospital for Women, Randwick, New South Wales, Australia.

Session 4 / 1650-1710

NEW METHODS FOR SUBMUCOUS FIBROIDS

Ang C

Uterine fibroids are the most common benign solid tumours found in the female genital tract, estimated to be present in 20-70% of women. Arising from a single smooth muscle cell, they are hormonally dependent, and grow in a path of least resistance. 5-10% of fibroids are submucous and the symptomatology they give rise to includes heavy menstrual bleeding and effects on fertility outcomes.

Hysterectomy and excision by laparotomy were long considered the standard surgical modes of treatment. Hysteroscopic resection by first generation technology developed in the 1980s and became the accepted minimally invasive method for submucous fibroids for preservation of fertility with excellent success rates. Nevertheless, complications of hysteroscopic myomectomy are well described.

In the last decade, several technologies and techniques have been developed to treat symptomatic fibroids. These include magnetic resonance guided focussed ultrasound ablation (MRgFUS) and second-generation ablative techniques. Current evidence suggests successful treatment outcomes with improved safety and decreased operative risks, whilst still limited by patient and anatomical factors.

AUTHOR AFFILIATION: Dr Catarina Ang; Head of Gynaecology 1 Unit, Royal Women's Hospital, Melbourne, Victoria, Australia.

PROGRAM ABSTRACTS Friday 1 June

Session 5 / 0800-0820 CHRONIC PELVIC PAIN

Evans S

Pelvic Pain is estimated to affect 176 million women in the 15-49 year age group. This outnumbers the people in this age group with Breast Cancer, Prostate Cancer, Asthma, Diabetes I and II and AIDS combined¹.

This presentation gives an overall framework for understanding chronic pelvic pain from both a gynaecological and pain medicine perspective. It emphasises and supports the central role of gynaecologists in providing effective care for women and girls with pelvic pain and considers practical ways that gynaecologists can upskill to meet the demands of this condition.

REFERENCE:

1. The Pelvic Pain Report – 'The \$6Billion Woman and the \$600Million Girl', available www.painaustralia.com.au

AUTHOR AFFILIATION: Dr Susan Evans; Gynaecologist, Laparoscopic Surgeon, Pain Medicine Specialist, Adelaide, South Australia, Australia.

Session 5 / 0840-0900 PELVIC PAIN AND PELVIC FLOOR MUSCLE OVER ACTIVITY

Jarvis S

OUTLINE: For patients with chronic pelvic and/or perineal pain (CPPP) not responding to conventional medical and/or surgical interventions it may well be worth considering the role of the pelvic floor muscles (PFM).

The influence of PFM dysfunction, i.e. chronic PFM over activity in patients with CPPP is often overlooked as attention is usually paid to the viscera¹. PFM dysfunction may contribute to patients presenting with conditions such as chronic pelvic pain, obstructed defaecation as seen in puborectalis syndrome, proctalgia fugax, vaginismus, vulvodynia, prostatitis, interstitial cystitis, levator ani syndrome and urgency/frequency²⁻⁹.

PFM over activity may occur in response to CPPP and subsequently become a secondary pain generator thus helping to maintain the pain and possibly amplify it, or, in some patients it may present as the primary source of pain.

Often there is an "Injury Pool" where a sum of events occurs over time, a trigger event may precipitate acute pain which may become recurrent and if not managed well, become persistent. This may result in chronic tense muscular holding patterns, i.e. over activity in the PFM and external pelvic mms, upper leg

and abdominal mms which attach to bony pelvis close to urinary and anal sphincters¹⁰.

Thus repetitive, dis-coordinated over activity of the PFM may consequently over load the PFM and contribute to the development of myofascial trigger points (TPs)¹¹, pelvic myofascial pain¹⁰ and subsequently contribute to the development of chronic pain. A trigger point is the end result of mm injury at motor end plate¹¹. PFM over activity may be painful locally and or refer pain into the lower back, abdomen or perineum, or it may cause urethral, vaginal or anal symptoms via compression¹⁰.

CPPP may develop through a combination of mechanical, neurological, biochemical and emotional factors.

ASSESSMENT of the PFM for the presence of over activity may include:

1. Vaginal and/or anal palpation of the PFM at rest, while contracting, holding and relaxing; and to determine if the pliability of the muscle is such that it can sustain stretch without pain. Abnormalities may include: increased bulk, over contraction, myalgia, TPs, inability to contract-hold-relax (CHR) and sustain stretch without pain. Assessment of introital and/or vaginal capacity (antero-posterior, lateral and longitudinal).
2. Manometry – vaginal and/or anal.
3. Surface Electromyography (sEMG).

Confirming PFM over activity should be done in the context of the clinical history of pain; presence of vaginal/urethral/ano-rectal dysfunction; vaginal and/or anal palpation and/or manometry and sEMG of the PFM if appropriate.

TREATMENT options may include:

1. Physiotherapy for PFM – techniques to facilitate PFM relaxation via specific PFM range of motion CHR exercises, i.e. "down training" of the PFM. Biofeedback, anal and/or vaginal, via manometry (cm H₂O) or sEMG (μV) to achieve and enhance the above; PFM stretches – manual or via active and/or static dilator therapy. Management of associated posture (sitting and standing), external pelvic, lower abdominal, upper legs, LBP, SIJ, PS dysfunctions^{1, 12-14}.
 2. Botulinum toxin type A injections into the PFM^{15,16}.
 3. Myofascial trigger point therapy, Myofascial releases⁸.
 4. Trigger Point injections¹⁷.
 5. Combined treatments e.g. OVERcome¹⁸.
 6. Management of concomitant bladder, bowel, postural and sexual dysfunctions as indicated.
- Botulinum toxin type A injected into the PFM inhibits mm contraction and decreases pain. For the symptoms of dyspareunia and dyschezia, the mechanical effect of PFM



PROGRAM ABSTRACTS Friday 1 June

relaxation is an obvious factor for reducing pain^{15,16}. The reversible partial paralysis of the PFM removes a noxious stimulus in the cycle of events that can compound pain. The use of botulinum toxin type A should only be considered if the patient does not improve with conventional physiotherapy. Its use may provide a window of opportunity regarding rehabilitation of the over active PFM and act as a circuit-breaker in the pain-muscle-over-activity-pain cycle.

- Combined treatments such as in the "OVERcome"¹⁸ study have shown that PFM relaxation exercises in conjunction with olive oil as a lubricant and Replens™ as a moisturiser resulted in a significant decrease in dyspareunia and improvement in sexual function in women suffering from dyspareunia post treatment of breast cancer.
- For those suffering from CPPP and PFM over activity, who by the very nature of their symptoms and associated dysfunctions may be difficult to diagnose and treat, non-surgical interventions that have an effect on reducing pain and improving function and quality of life may be clinically significant and are often overlooked in pelvic and or perineal pain as attention is usually paid to the viscera.

Management of patients with CPPP ideally would be multi-disciplinary, encompassing not only medical and surgical interventions but in addition both behavioural and physical therapies.

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AUTHOR AFFILIATION: Ms Sherin Jarvis; Clinical Specialist Pelvic Floor Physiotherapist, Royal Hospital for Women, Randwick, New South Wales, Australia. Conjoint lecturer, UNSW, Kensington, New South Wales, Australia. Private Practice: Women's Health and Research Institute of Australia, Sydney, New South Wales, Australia.

PROGRAM ABSTRACTS Friday 1 June

Session 5 / 0900-0920

BLADDER PAIN SYNDROME

Woolcock J

In a cohort of 150 women in Australia with chronic pelvic pain 53% had bladder pain syndrome (BPS) and 60% of these had endometriosis (Cheng et al Eur Urol 2012) however this condition is frequently overlooked and underdiagnosed even amongst gynaecologists and pelvic pain specialists.

The pathogenesis of BPS and its specific variant interstitial cystitis (IC) remains unknown however the significant overlap with other chronic pain disorders such as endometriosis and irritable bowel syndrome supports theories that it is a neuropathic condition with neural 'cross-talk' in the dorsal root ganglia, spinal cord and brain. (Furuta et al Int J Urol 2012)

The diagnosis of BPS is made in patients who have bladder pain and urinary frequency or urgency with normal cystoscopic findings and other pathological causes have been excluded. A careful history must be obtained in all chronic pelvic pain patients with specific questioning about the relationship of the pain to bladder filling and emptying. A symptom questionnaire such as the O'Leary-Sant symptom score assists with standardisation and follow-up after treatment (O'Leary et al Urol 1997). Urine microscopy and culture, urine cytology and a bladder diary should be standard investigations. On cystoscopy interstitial cystitis can be diagnosed by a Hunner's ulcer (a pale central scar or fissure surrounded by patches of red tissue from small radiating blood vessels) or by glomerulations (petechial haemorrhages which appear after bladder emptying following hydrodistension). Bladder capacity is often reduced.

Bladder pain syndrome can often cause a significant deterioration in quality of life however there is still no consensus for the optimal treatment approach. Bladder retraining and psychosocial support in combination with neuromodulators such as amitriptyline or gabapentin are often used. Oral sodium pentosan polysulfate (Elmiron) was shown to improve symptoms in 32% of patients with IC (Rovner Urology 2000). Intravesical heparin, dimethyl sulphoxide (DMSO) and botulinum toxin have also shown modest benefits. There have been promising results from sacral S3 or S4 root stimulation. Out of 30 patients, 42% reported at least a 50% improvement in symptoms at 6 months (Powell et al J Urol 2010). Bladder augmentation, cystoplasty and urinary diversion have been used for the most refractory cases.

AUTHOR AFFILIATION: Dr Jane Woolcock; Obstetrician/
Gynaecologist, Adelaide, South Australia, Australia.

Session 6 / 1030-1050

BREAST CANCER UPDATE

French J

OBJECTIVE: to update and inform the audience of the many and varied changes in practice that have occurred over the past decade in management of breast cancer.

METHODS: Summary of relevant techniques, trends and innovations in the areas of diagnosis, treatment in the disciplines of: 1. surgery, 2. radiotherapy, 3. medical oncology.

RESULTS: The following areas will be addressed. Diagnosis: pre-operative breast staging with MRI. The intraoperative assessment of lymph nodes using One Step Nucleic Acid is a new novel method of evaluating the presence of metastases.

- 1. SURGERY:** this is a rapidly evolving field. The role of sentinel node biopsy (SLNBx) along with current controversies will be addressed including a summary of the Z0011 trial. Oncoplastic surgery is becoming more widely adopted across Australia and encompasses a wide range of operations that includes reshaping procedures such as breast reduction / mastopexy now performed in conjunction with breast conserving operations right through to immediate breast reconstruction following mastectomy. Current trends include nipple sparing mastectomy (NSMx) with immediate single stage implant based reconstruction and the use of lipofilling to correct contour defects.
- 2. RADIOTHERAPY:** The two areas that will be discussed are: cardiac sparing breast radiotherapy and use of marking clips in cavities to better refine delivery of radiotherapy to the tumour bed.
- 3. MEDICAL ONCOLOGY:** Two important advances have been made over the past decade: i) Introduction of the monoclonal antibody Trastuzumab for HER 2 positive breast cancer and ii) the use of aromatase inhibitors (AI) for ER positive breast cancers in postmenopausal women.

CONCLUSION: While the basic therapy elements of breast cancer management have largely remained unchanged for the past decade (surgery, radiotherapy and chemotherapy) the methods by which each of these treatments is delivered has undergone enormous change.

AUTHOR AFFILIATION: Dr James French MBBS FRACS, Head of Breast Surgery Westmead Breast Centre, Westmead, New South Wales, Australia.



PROGRAM ABSTRACTS Friday 1 June

Session 6 / 1050-1110

HRT IN BREAST CANCER SURVIVORS

Baber R

25% of women are diagnosed with breast cancer before age 50 and, of these, 80% will experience troublesome menopausal symptoms during and after treatment.

Non hormonal treatments for menopausal vasomotor symptoms, including phytoestrogens, evening primrose oil, Chinese herbs and acupuncture have shown only limited efficacy. Non hormonal prescription medications which have been shown to have some effect include Clonidine, Gabapentin and several SSRIs and SNRIs. The place of these treatments will be discussed.

Hormone replacement therapy remains the most effective treatment for vasomotor symptoms however its use after breast cancer remains controversial. In women free of breast cancer combined treatment with premarin and provera was associated with an increased risk of breast cancer with long term use in one randomised trial whilst the use of premarin alone was not. The use of tibolone in the same group of women was not associated with an increased risk of breast cancer.

Two major RCT's have examined HRT use after breast cancer. One found an increased risk of recurrence after two years follow up, the other no increase in recurrence after four years. The type of HRT used differed and these results and the overall effect of HRT on breast cancer will be discussed including the role of tibolone after breast cancer has been diagnosed.

Lastly two new treatments, Estetrol and the TSEC complex, not yet available in Australia will be discussed and conclusions drawn.

AUTHOR AFFILIATION: Associate Professor Rod Baber; University of Sydney, Royal North Shore Hospital, St Leonards, New South Wales, Australia.

Session 6 / 1110-1130

RECENT DEVELOPMENTS IN OVARIAN CANCER DIAGNOSIS AND TREATMENT

Carter J

Epithelial ovarian cancer holds the dubious distinction as the most deadly of all the gynaecological cancers. More women die from ovarian cancer each year than from all the other gynaecological cancers combined. Despite initial enthusiasm, ovarian cancer screening using a combination of pelvic examination, CA125 or sonography has not been shown to reduce ovarian cancer mortality and is not recommended.

Whilst most ovarian cancers are sporadic, up to 10% will have a hereditary component, with deleterious mutations in the BRCA1 or BRCA2 gene and miss-match repair genes being the most common. Ovarian cancer risk is increased in patients having "incessant" or repeated ovulatory trauma to the ovarian surface epithelium. Patients whose ovulatory history is not affected by oral contraception, pregnancy or lactation are at an increased risk.

Recent evidence suggests that many/all ovarian cancers arise from preinvasive fallopian tube disease and based on morphological and molecular genetic analysis a new or dualistic model of ovarian tumorigenesis has been proposed. Most symptoms attributed to ovarian cancer are non-specific and most patients will present in an advanced stage with disease spread outside the ovaries.

Risk reducing surgery includes performing bilateral salpingoophorectomy in women at high risk. Issues for consideration include the definition of who is at an increased risk, the timing of such a procedure, development of menopausal symptoms and management of these and whether a hysterectomy should be done at the same time.

AUTHOR AFFILIATION: Professor Jonathan Carter; Sydney Gynaecological Oncology Group, Sydney Cancer Centre, Royal Prince Alfred Hospital, The University of Sydney, New South Wales, Australia.

PROGRAM ABSTRACTS Friday 1 June

Session 6 / 1130-1150

ENDOMETRIAL PATHOLOGY IN PATIENTS WITH BREAST CANCER

Hogg R

Breast cancer is a common antecedent in women presenting with either symptoms of uterine pathology or for surveillance whilst undergoing adjuvant hormonal treatment following surgery +/- radiation. A careful family history may suggest co-existence of Lynch Syndrome, which has implications for prophylactic surgery to reduce the risk of gynaecological cancer.

There is no proven role for ultrasound and endometrial biopsy in surveillance for endometrial cancer in asymptomatic patients, whether on Tamoxifen or not. Postmenopausal women on Tamoxifen are at 2-3 times the population risk for endometrial hyperplasia and endometrial carcinoma (risk of carcinoma 2.5 per 1000 woman years). Carcinomas in these women are similar to women not taking Tamoxifen. There is also a small increase in the incidence of uterine sarcomas. More commonly, Tamoxifen is associated with an increased incidence of endometrial polyps.

A similar risk has not been shown for premenopausal women on Tamoxifen, though this may be due to statistical factors. Premenopausal women may present with changes in menstrual pattern. They should be assessed and treated as per standard protocol. Transvaginal ultrasound may show cystic spaces in polypoidal endometrium, with cystic hyperplasia seen on curettings.

Aromatase inhibitors are generally used only in post menopausal women. There are no data to suggest increased incidence of endometrial pathology in these patients.

Oestrogen or progesterone, including Mirena, should be avoided in post breast cancer patients. Strategies for management of these patients will be discussed.

AUTHOR AFFILIATION: Clinical Associate Professor Russell Hogg; Gynaecological Oncology, Westmead Hospital, Wentworthville, New South Wales, Australia. Specialist Services, Norwest Private Hospital, Bella Vista, New South Wales, Australia, Sydney Adventist Hospital, Wahroonga, New South Wales, Australia.



PROGRAM ABSTRACTS Saturday 2 June

Session 9 / 0800-0820

LAPAROSCOPY IN CHILDREN AND ADOLESCENTS

Deans R

The aim is to assess the role of laparoscopy in infants and adolescent patients. Although the safety of laparoscopy has been established since the early 1970s, there was initially slow uptake for its use in the paediatric and adolescent patient. Specific surgical considerations need to be made with placement of the ports and operating, namely the reduced size of the peritoneal cavity and access to the pelvis being reduced, the reduced thickness and high compliance of the abdominal wall, and the liver position, lying below the costal margin, and crossing the midline. When talking these factors into consideration, the use of laparoscopy is a useful tool for gynaecologists operating on infants and adolescents. Specific conditions where laparoscopy is particularly useful in this age group: are ovarian cysts, removal of intra abdominal gonads in undervirilised XY conditions or dysgenetic gonads, transposition of the ovaries prior to radiotherapy, and diagnosis and treatment of acute or chronic abdominal pain. Although children and adolescents generally recover well from open laparotomy, they also suffer the consequences of trauma. The benefits of diminished post operative pain, shorter hospital stay, lower incidence of scarring and better cosmesis should be considered as important for children and young adults. With increasing use of this laparoscopy in younger patients it is important to be aware of the specific considerations when dealing with this group of patients.

AUTHOR AFFILIATION: Dr Rebecca Deans; University of New South Wales, Royal Hospital for Women and Sydney Children's Hospital, Randwick, New South Wales, Australia.

Session 9 / 0820-0840

ERGONOMICS OF SINGLE INCISION LAPAROSCOPIC SURGERY

Siow A

Single Incision Laparoscopy brings conventional laparoscopy to a new level of minimally invasive surgery. With all instruments introduced through only one incision, surgery can be difficult and cumbersome. Although advanced instruments have been created for Single Incision Laparoscopy, there are still ergonomic issues of Single Incision Laparoscopy that need to be addressed for a smooth and safe surgery.

In this lecture, the ergonomics of Single Incision Laparoscopy with concepts on Circumscribing, Vertical Zone Triangulation and Instrument Altitude Placement will be discussed to clarify and simplify Single Incision Laparoscopy. With the right Circumscribing Technique, Single Incision Laparoscopic Cystectomy can be done without instrument knocking into one

another. With the understanding of Vertical Zone Triangulation, it is possible to perform simple Single Incision Laparoscopic suturing such that selected cases of Single Incision Laparoscopic Myomectomy can be done effectively.

AUTHOR AFFILIATION: Dr Anthony Siow; Medical Director, Minimally Invasive Surgery, Parkway Gynaecology Screening & Treatment Centre, Gleneagles Hospital, Singapore

Session 9 / 0840-0900

NEW TECHNOLOGIES, OLD DANGERS... CAPACITIVE COUPLING AND FRIENDS

Lyons S

INTRODUCTION: During my training I gained the impression from my teachers that diathermy could be safely used at open surgery with what at times seemed like reckless abandon. Yet the use of the same monopolar technology at laparoscopy was always with more-than-a-little trepidation. Monopolar electrosurgery's somewhat shaky reputation was related to the perceived increased risk of injury from stray current compared to that of bipolar electrosurgery. I didn't have a great grasp of the physical principles involved, but I knew who were the main culprits responsible for stray-current electrosurgical injury – capacitive coupling, insulation failure and direct coupling.

Capacitive coupling, however, was supposedly only a problem with the so-called "hybrid cannula systems", and these laparoscopic ports had been outlawed for many years¹. Because regular "HiPot" insulation testing of reusable monopolar instruments had become mandatory, the risk of insulation failure injury was also discounted; anyway, the use of disposable monopolar instruments was becoming more widespread. As direct coupling tissue burns are born of either capacitive coupling or insulation failure current, the risk of this mechanism of injury should therefore also be minimal.

So... is monopolar electrosurgery's "bad boy reputation" still warranted or a hangover from deeds past? This is an important question to answer – monopolar electrosurgery remains a popular energy source for operative laparoscopy due to its versatile range of tissue effects, availability and low cost². Indeed, despite the increasing popularity of alternative energy sources such as ultrasonic and new-generation bipolar technologies, monopolar electrosurgery has married well with the new technologies of single port laparoscopy and robotic laparoscopy. These relationships may, however, prove to be less than harmonious.

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OBJECTIVES: A review of the medical literature, Coroner's Case reports from Australia, and medical negligence cases from the USA will be presented. From such information it is evident that inadvertent injury from monopolar stray current is an ever-present risk during conventional laparoscopy, single port laparoscopy and robotic laparoscopy.

Video clips from laparoscopic models, animal labs and surgical procedures will be used to illustrate that:

- Capacitive coupling can occur with commonly used plastic laparoscopic ports;
- Capacitive coupling can occur with both re-usable and disposable monopolar instruments;
- Capacitive coupling has the potential to complicate any operative laparoscopy where monopolar electrosurgery is used;
- Insulation failure generally develops as a result of capacitive coupling;
- Capacitive coupling, insulation failure and direct coupling can all result in bowel injury that may result in delayed perforation;
- Measures can be implemented to decrease or even eliminate the risk of inadvertent monopolar electrosurgery injury at laparoscopy.

CONCLUSIONS: Deaths due to bowel injury from stray monopolar current have recently been reported at each of conventional laparoscopy, single port laparoscopy and robotic laparoscopy. It must therefore be concluded that monopolar electrosurgery's dangerous reputation remains justified. We should not be surprised, however, that stray current injuries occur during monopolar electrosurgery, as the physical principles that dictate the current's behaviour are well established. What is surprising is that available safeguards to make monopolar stray-current injury a thing of the past have generally not been embraced.

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<http://www.youtube.com/user/EndoGynaecology/feed>

AUTHOR AFFILIATION: Dr Stephen Lyons; The Mater Clinic, North Sydney, New South Wales, Australia

Session 9 / 0900-0920

FETOSCOPY: THE STATE OF THE ART

Welsh A

This lecture will discuss current clinical indications for Fetoscopy. In particular it will focus upon the application of selective laser photocoagulation of communicating vessels (SLPCV) for twin-twin transfusion syndrome (TTTS). It will include patient selection, equipment and procedural details (including video footage of the procedures) for SLPCV as well as exploring future

clinical and research strategies. Current outcome statistics both for New South Wales and internationally will be presented^{1, 2}.

Other proposed indications for Fetoscopy, including evaluation of lower urinary tract obstruction³ and fetal endoscopic tracheal occlusion for congenital diaphragmatic hernia repair^{4, 5} will be discussed.

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AUTHOR AFFILIATION: Professor Alec Welsh; Maternal and Fetal Medicine, Royal Hospital for Women, Randwick, New South Wales, Australia.

Session 9 / 0920-0940

APPRAISAL OF ROBOTIC SURGERY FOR HYSTERECTOMY

Chern B

Today, the advantages of minimally invasive surgery are well accepted. There is a clear movement towards minimally invasive surgery in the field of benign gynaecology and gynaecologic oncology. As gynaecologic oncologists around the world are exploring laparoscopic techniques which are associated with a significant learning curve and substantial amount of time and energy necessary to develop and maintain such advanced laparoscopic skills, the era of robotic surgery emerges.

The emphasis is on robotic hysterectomy with staging and robotic radical hysterectomy. Most reports are case series ranging from 1 to 118 robotic surgeries per publication. Some of the publications present robotic experience without comparison,



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whereas others compare robotic cases to laparoscopic or laparotomy cases performed retrospectively.

Most publications agree on the following: robotic surgery is a feasible and safe option for gynaecologic oncology procedures with reasonable operative times, low blood loss, and short hospital stays. Furthermore, lymph node counts for robotic cases appear to be at least as good as results obtained through laparoscopy and laparotomy.

However, it is costly and may not be within reach of a significant number of patients. The investment made in acquiring this technology is large, and institution that choose to adopt this technology need to monitor their costs and outcomes so that they can maximise its cost-effective use in their centre.

To decrease costs, centres could maximise caseloads, consider keeping the robot operational for longer, if possible, and use the technology for multiple indications, particularly those with greater potential impact on patient outcomes and institutional cost savings.

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AUTHOR AFFILIATION: Prof. Bernard Chern; Deputy Chairman of Obstetrics and Gynecology Division, KK Women's and Children's Hospital, Singapore.

Plenary Lecture / 1000-1030 RECURRENCE OF UTERINE MYOMA AFTER LAPAROSCOPIC MYOMECTOMY: WHAT ARE THE RISK FACTORS?

Shiota M, Kotani Y, Umemoto M, Tobiume T

OBJECTIVE: Uterine myoma is a common gynaecologic disease. Myomectomy is selected to preserve the uterus, and with recent advances in laparoscopic technology, laparoscopic myomectomy (LM) has become a common treatment. However, myoma can recur after LM, and to date, reports on post-LM recurrence rates and risk factors have been inconsistent. This retrospective study examines post-LM recurrence rates and the possible risk factors for recurrence.

MATERIALS AND METHODS: Between 1995 and 2010, 250 patients who underwent LM at a single institution were followed from the postoperative 6th month to the 5th year semiannually for recurrence by ultrasound/MRI. Mean age, BMI, pre-operative gonadotropin releasing hormone agonist (GnRHa) therapy, operative time, blood loss, number of removed myomas, and largest myoma diameter were compared between patients with recurrence and those without. Recurrence rates were also investigated by individual risk factors, including patient age, GnRHa therapy, number of removed myomas, and largest tumour diameter.

RESULTS: Cumulative post-LM recurrence rates were 15.3%, 43.8%, and 62.1% at postoperative years 1, 3, and 5, respectively. There were significant differences in operative time, blood loss, and number of removed myomas between patients with recurrence and those without. Analysis of risk factors revealed significant correlation between recurrence rates and patient age, number of myomas, and myoma size.

DISCUSSION: Risk of post-LM recurrence increases over time. Risk factors are age, myoma size, and number of tumours. Particular attention to recurrence is required for patients with uterine myomas of > 10cm diameter, with numerous myomas, and of 35 years or older.

KEY WORDS: Uterine myoma, Laparoscopic myomectomy, recurrence.

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AUTHOR AFFILIATION: Mitsuru Shiota, Yasushi Kotani, Masahiko Umemoto, Takako Tobiume. Department of Obstetrics and Gynecology, Kinki University Faculty of Medicine, 377-2 Ohno-higashi, Osaka-sayama, Osaka, 589-8511, Japan.

Session 10 / 1120-1140 **PLACE OF LAPAROSCOPY IN THE LARGE OVARIAN TUMOUR**

Chan F

Diagnosis and management of pelvic mass continue to pose a challenge in gynaecology. Pelvic masses can be gynaecological or non-gynaecological in origin. While majority of these masses is benign in nature, small proportion is malignant.

Clinical history, family history, symptoms assessment, clinical examination, tumour markers, understanding of disease process contribute to the triage of ovarian mass for risk of malignancy.

Such triage allows the timely referral of patient with this mass to gynaecological oncologist.

The role of laparoscopy in the management of adnexal mass has been well established with reduction in hospital stay, better cosmetic result, less analgesia requirement and faster postoperative recovery.

Due to the volume of the mass and the risk of rupture, large ovarian mass can make laparoscopic assessment and removal more difficult. Various techniques will be discussed and presented.

AUTHOR AFFILIATION: Dr Felix Chan; Liverpool Hospital, Liverpool, New South Wales, Australia.

Session 10 / 1140-1200 **CANCER OF THE OVARY AND LAPAROSCOPIC SURGERY**

Salfinger S

Laparoscopic surgery has traditionally been frowned upon for the treatment of ovarian carcinoma. The proposed pitfalls being under-staging and inability to resect disease. There are however many applications for laparoscopy in treatment of ovarian cancer:

- Staging of borderline tumours
- Definitive management of non-epithelial ovarian carcinoma
- Pre-treatment assessment of epithelial ovarian carcinoma
- Definitive surgery for epithelial ovarian malignancies
- Post primary treatment
 - Placement of intraperitoneal port

- Second look laparoscopy
- Assessment of recurrence
- Resection of recurrent disease

The benefits risks and contraindications of these will be discussed.

AUTHOR AFFILIATION: Dr Stuart Salfinger MBBS, FRANZCOG, CGO. Certified Gynaecologic Oncologist, Western Australia, Gynaecologic Cancer Service – KEMH & SJOG Hospitals, Clinical Senior Lecturer, School of Women's and Infants Health – University of Western Australia, Perth, Western Australia, Australia.

Session 10 / 1200-1220 **WHAT IS THE FUTURE OF ROBOTICS IN AUSTRALIA?**

Valmadre S

Robotic surgery is becoming increasingly popular particularly in the areas of gynaecological and urological surgery.

The well publicised benefits of Robotic surgery include those associated with minimally invasive surgical techniques as well as being more ergonomic, better vision with a more magnified, 3-D image and a shorter learning curve.

The major barriers to Robotic surgery's widespread dissemination is cost and to some extent a lack of long term outcome data.

These factors will be discussed.

AUTHOR AFFILIATION: Dr Susan Valmadre; VMO Royal North Shore hospital, North Shore Private Hospital, St Leonards, New South Wales, Australia. Mater Hospital North Sydney, New South Wales, Australia.

Session 10 / 1220-1240 **LAPAROSCOPY IN PREGNANCY: IS IT THE BEST APPROACH?**

Smith CJ, Chow JSW, Hardas G, Merkur H

INTRODUCTION: Laparoscopy offers a feasible alternative to laparotomy as an effective approach in the management of surgical issues in pregnancy. Historically, it has been avoided during pregnancy because of potential harm including fetal hypoxia and acidosis from factors related to the pneumoperitoneum, and injury to the fetus from uterine perforation by either trocar or Veress needle. However, with growing evidence to support both fetal and maternal safety¹, laparoscopy is now being implemented across all trimesters



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for treatment of a range of gynaecological and general surgical pathology.

The main maternal advantages of laparoscopy over laparotomy are decreased post-operative narcotic requirements, lower wound complications, earlier mobilisation, and shorter hospital stay. In addition, laparoscopy often provides improved surgical exposure, requiring less uterine manipulation which may result in lower rates of spontaneous miscarriage and preterm delivery².

OBJECTIVE: We will present a medico-legal case in which laparoscopy was argued to be the cause of an adverse fetal outcome. This case will be used as platform to appraise the literature focusing on the safety and efficacy of laparoscopy in pregnancy. We will also outline a number of peri-operative considerations for laparoscopic surgery in this setting. These will include patient positioning, initial port placement, insufflation pressure, intra-operative carbon dioxide monitoring, fetal heart rate monitoring, and thromboembolic prophylaxis³.

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AUTHOR AFFILIATION: Dr Christopher J. Smith, Dr Jason S. W. Chow, Dr George. Hardas, Associate Professor Harry. Merkur; Sydney West Advanced Pelvic Surgery Unit, New South Wales, Australia.

FREE COMMUNICATIONS ABSTRACTS SESSION A Friday 1 June

1600-1610

REPORT ON AGES/COVIDIEN TRAVELLING FELLOWSHIP 2011

Bedford N

In 2011 I was privileged to receive the AGES/Covidien sponsored Travelling Fellowship. This important initiative enables trainees and Fellows to acquire an international perspective on Gynaecological surgery. From my perspective, I wanted to attend a large international conference and present data from the long-term experience with laparoscopic paravaginal repair acquired at Flinders Medical Centre. Our abstract was accepted for presentation at the 36th IUGA conference in Lisbon. I also wanted to observe some 'masters' in the field, and having met John Miklos and Rob Moore in Adelaide at the 2011 AGES Pelvic Floor Symposium it seemed logical to follow this up and visit them in Atlanta. Finally I wanted to experience a truly large American hospital, and the Cleveland Clinic seemed a good choice with its highly regarded Reconstructive Pelvic Surgery Fellowship program.

The three components of this trip were all completely different, yet complemented each other nicely providing different perspectives on the current state of reconstructive vaginal surgery. In this presentation I will discuss the highlights of this trip, and the lessons learnt and applied since my return. I am grateful to the AGES Awards Subcommittee for the opportunity to travel, and to AGES and Covidien for their generous financial support.

AUTHOR AFFILIATION: N. Bedford; Capital & Coast District Health Board, Wellington, New Zealand.

1610-1620

AN ESTABLISHED ENDOGYNAECOLOGICAL UNIT'S RETROSPECTIVE ANALYSIS OF CASELOAD AND COMPLICATIONS

*Cebola M, Choi S, Cario G, Rosen D, Chou D, Reyftman L,
de Rosnay L, Baghlaf O*

We present the data of a multi-centre gynaecological endoscopic unit with over seven thousand procedures encompassing greater than eight years of experience. The group is comprised of five advanced laparoscopic surgeons. Annual retrospective review of the cumulative data to assess the range of gynaecological procedures and the incidence of associated complications provides invaluable insight to subtle changes in the dynamic caseload.

An increasing number of major gynaecologic procedures now make up over 85% of the units surgical activity including total laparoscopic hysterectomies, laparoscopic pelvic floor repairs, laparoscopic resection of endometriosis and laparoscopic myomectomies.

Of note; in 2011, pelvic floor repairs increased by 45%, with an even distribution in the rise of McCall's culdoplasty, laparoscopic Burch and laparoscopic mesh sacrocolpopexy. Interestingly, a third of the cumulative endometriosis related bowel resections (predominantly rectal) were done in 2011 providing evidence of more severe disease making up a greater proportion of cases being referred to the unit.

Regardless of the predominance of complex surgery, the complication rate remained low at less than 0.6%. Entry-related injuries represent almost 15% of all complications, and did not appear to be significantly associated with the method of attaining abdominal access for pneumoperitoneum.

There was an increase in conversion to laparotomy related to myomectomy greater than 10cm, however this remains an infrequent complication at less than 0.6%. Particularly, injury to organs or vessels occurred in less than 0.5% of cases, and in keeping with the trend witnessed in 2010, the majority managed laparoscopically and independently by the operative gynaecologist.

Focus will then be granted to specific complications. These cases include conversion to laparotomy for myomectomy (all greater than 10 cm), abdominal mass greater than 20cm, a neovagina procedure, cases warranting return to theatre, laparoscopic repair of bowel injury, and interesting complications of pubic osteomyelitis and bowel obstruction following laparoscopic paravaginal repair.

Comparative rates of major complications among units with analogous percentage of major operative cases are similar. This information is vital to guiding direction for the practice so that it can maintain surgical standards whilst innovating change for tomorrow.

AUTHOR AFFILIATION: M. Cebola, S. Choi, G. Cario, D. Rosen, D. Chou, L. Reyftmann, P. de Rosnay, O. Baghlaf; Sydney Women's Endosurgery Centre (SWEC), St George Private Hospital, Kogarah, New South Wales, Australia.



FREE COMMUNICATIONS ABSTRACTS

SESSION A Friday 1 June

1620-1630

LAPAROSCOPIC RESECTION OF ACCESSORY UTERINE CAVITY

Francis C, Miligkos D, Behrens R, Loudon K.

CASE: A 21 year nullipara patient presented with a history of severe left sided dysmenorrhoea since menarche. This was unresponsive to the combined oral contraceptive pill, progesterone treatment, zoladex and simple analgesia, and required multiple hospital admissions for pain control.

Diagnostic laparoscopy, hysteroscopy and imaging showed the presence of a normal endometrial cavity with a 3cm diameter left myometrial bulge containing some fluid within. The left fallopian tube and round ligament were inserted to the uterine cornua in the conventional way suggesting a non-communicating accessory uterine cavity.

She underwent a laparoscopic resection of the accessory uterine tissue which extended into the broad ligament, without breaching the normal uterine cavity. Dissection of the nodule revealed a cavity with chocolate/old blood content and histology confirmed the presence of myometrial tissue with flattened lining endometrium and haemosiderin pigment consistent with an accessory uterine tissue. On follow up review two months postoperatively the patient reported cessation of all menstrual pain.

DISCUSSION: Accessory cavitated uterine masses although rare, should be considered as a cause of pelvic pain in young patients presenting with severe pelvic pain. They are characterised by the presence of functional endometrium within a non-communicating uterine cavity and an otherwise normal uterus. Correct diagnosis is essential as response to medical treatment is poor and only surgical resection of the mass will confer symptom resolution.

A review of current literature reveals these masses all appear in a similar anatomical site near the insertion of the round ligament suggesting an embryological rather than pathological process.

Although laparotomy has been used in the majority of reported cases, in the hands of experienced surgeons, laparoscopic resection is a successful and safe alternative.

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1630-1640

BLADDER DYSFUNCTION FOLLOWING LAPAROSCOPIC GYNAECOLOGICAL SURGERY WITH OR WITHOUT ADEPT ANTI-ADHESION SOLUTION

Nesbitt-Hawes E, Zhang C, Won HR, Law K, Abbott J

STUDY OBJECTIVE: To determine the incidence of bladder dysfunction following laparoscopic gynaecological surgery in those who have surgery with or without usage of ADEPT.

DESIGN: Prospective observational study (Canadian Task Force Classification II-2).

SETTING: Tertiary referral hospital in Sydney, Australia.

PATIENTS: 147 women undergoing laparoscopic gynaecological surgery for benign pathology.

INTERVENTION: Data relating to pre-operative baseline bladder function, post-operative bladder function, demographic, intra and post-operative information, and the time to discharge were collected.

MEASUREMENTS AND MAIN RESULTS: From May 16, 2011 to February 2, 2012, 147 women underwent laparoscopic gynaecological surgery. 124 of these patients were included in the study; 62 received ADEPT and 62 did not. The women in the non-ADEPT group were significantly older than those in the ADEPT group ($p=.007$). There was no other significant difference in demographic data between the two groups. Following surgery, 27/124 (21.8%) patients in total had post-operative bladder dysfunction. ADEPT was associated with significantly more bladder dysfunction ($p=.017$), but did not extend hospital admission significantly ($p=.143$). The type of procedure, pathology, number of surgical sites, and intra-operative opioid dosage influenced the likelihood of using ADEPT anti-adhesion solution. There was no difference between the ADEPT and non-ADEPT groups in operative time, post-operative opioid dosage, duration of catheterisation, or the duration of hospitalisation following removal of the catheter.

CONCLUSION: In this non-randomised study, there were significantly more women with post-operative bladder dysfunction when ADEPT was used, however this did not contribute to an extended hospital admission.

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FREE COMMUNICATIONS ABSTRACTS SESSION A Friday 1 June

1640-1650

LARGE RETROPERITONEAL (PRESACRAL) HAEMATOMA FOLLOWING POSTERIOR VAGINAL WALL REPAIR – A CASE REPORT AND VIDEO FOOTAGE OF LAPAROSCOPIC MANAGEMENT

de Rosnay P, *Rosen D, Cario G, Chou D, Reyftmann L, Choi S, Baghrif O.*

INTRODUCTION: Treatment of pelvic organ prolapse constitutes a major subject in gynaecology. Especially in the advanced state, management of these conditions is one of the most challenging problems a pelvic surgeon can face¹. In recent years much of the focus has been on the use of mesh in prolapse surgery but native tissue repair remains an important consideration. The associated risk profile with native tissue repair has been well documented in the literature but retroperitoneal haematomas are relatively uncommon². We present a case report with video footage demonstrating the laparoscopic management of a large presacral haematoma following posterior vaginal wall (native tissue) repair.

CASE: A 44 year-old multiparous woman presented with menorrhagia, stress urinary incontinence and symptoms of vaginal prolapse secondary to a stage 2 posterior compartment defect. Various management options were discussed and a decision was made to proceed to total laparoscopic hysterectomy, laparoscopic Burch colposuspension and posterior vaginal wall repair. There were no peri-operative concerns and the woman was discharged day 2 post-operatively.

She presented a week later with severe lower back/buttock pain and an ultrasound scan showed a moderately large clot between the vagina and rectum. This did not respond to conservative management and the clot was evacuated surgically by the vaginal route. Her symptoms, however, did not improve significantly and an MR scan showed the presence of a large retroperitoneal haematoma. Interventional radiology was attempted with little success. The haematoma was evacuated laparoscopically and video footage demonstrates the dissection required in order to facilitate this. The patient had an uneventful recovery with complete resolution of her symptoms.

CONCLUSION: Although the use of mesh in prolapse surgery has been far more topical of late, this case serves as a timely reminder that traditional native tissue repair also has significant risks. The evacuation of large retroperitoneal haematomas can be managed laparoscopically but requires a sound knowledge of pelvic anatomy and advanced laparoscopic skills.

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1650-1700

URETERIC ENDOMETRIOSIS CAUSING HYDRONEPHROSIS MANAGED BY LAPAROSCOPIC SEGMENTAL RESECTION AND PRIMARY SPATULATED URETERO-URETERO ANASTOMOSIS

Choi S, Cario G, Rosen D, Reyftmann L, De Rosnay P, Baghrif O, Testa G, Chou D.

This is a video presentation of the surgical management of a 41 year-old nulliparous lady with known endometriosis, who gradually developed recurrence of worsening dysmenorrhoea and severe left sided non-menstrual pelvic pain. Her pelvic ultrasound demonstrated a left hydronephrosis with renal pelvis diameter of 37mm. A CT scan confirmed hydronephrosis with dilated ureter extending down to the level of pelvic brim at the upper aspect of left sacroiliac joint. Her renal function was not compromised. Surgery was planned in conjunction with an urologist and a cystoscopy and retrograde pyelogram was carried out at the outset. A J-J stent was easily positioned.

Laparoscopically, in addition to moderated pelvic disease, she had a fibrotic inflammatory mass over left aspect of pelvic brim retracting into it the left infundibulopelvic ligament and sigmoid mesentery. The superficial structures were freed and dissection extended retroperitoneally. The lesion was also densely adherent to the anterior branch of internal iliac artery and a segment of fibrotic and narrowed ureter was identified. The lesion being an intrinsic ureteric problem, in contrast to extrinsic compressive process, there was no choice but to carry out a segmental resection with primary anastomosis.

Thus extended ureterolysis was carried out proximally and distally to allow freeing enough of ureter to facilitate tension free anastomosis. A spatulated primary anastomosis was carried out with 5x 4-0 PDS sutures over the J-J stent. Patient recovered uneventfully with dramatic symptomatic improvement. The stent was removed 6 weeks later.



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1700-1710

COMPLETE ANDROGEN INSENSITIVITY SYNDROME PRESENTING AS PRIMARY AMENORRHOEA, MEDICAL AND SURGICAL MANAGEMENT CONSIDERATIONS

Talmor A, Tsaltas J, Lawrence A, Vollenhoven B

Androgen Receptor (AR) mutations result in a variety of phenotypes in chromosomally 46 XY males. Over 400 mutations have been characterised and collectively these are known as Androgen Insensitivity Syndrome (AIS).

Complete AIS, previously termed Testicular Feminisation, results from various genetic mutations rendering the AR inactive. The gene encoding this receptor is located chromosome-X, thus exhibiting an X-linked recessive pattern of inheritance. Reinforcing the importance of screening other family members.

During organogenesis, the developing testes produce normal levels of anti-müllerian Hormone (AMH) thus inhibiting the development of the uterus and fallopian tubes, a typical finding in patients with CAIS.

This presentation is based on a patient being investigated for primary amenorrhoea. The diagnosis, investigations, management, and timing of laparoscopic gonadectomy for primary prevention of tumourigenesis in cryptorchidism will be discussed.

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1710-1720

PELVIC INFLAMMATION ASSOCIATED WITH THE USE OF FLOSEAL HEMOSTATIC MATRIX IN GYNAECOLOGICAL LAPAROSCOPIC SURGERY

Chan A, Ghosh B and Chang T

FloSeal is a gelatin based haemostatic matrix which combines bovine granules and human thrombin to achieve rapid haemostasis by promoting conversion of fibrinogen to fibrin. The advantages of FloSeal is its ability to control generalised surface oozing in areas unsuitable for sutures or difficult to access, and has been particularly useful in patients with deranged coagulation. Use of FloSeal is well established in different surgical settings, including Obstetrics and Gynaecology, Spinal and Cardiac surgery.

This presentation will discuss two cautionary tales of side effects from the use of FloSeal where the patients had presented to the hospital within one week post-operatively with pain and elevated inflammatory markers and were managed conservatively. In the literature, FloSeal has been associated with eosinophilic inflammatory response possibly secondary to reaction to the bovine granules used and small bowel obstruction between day 7-9 post operatively secondary to adhesions or inflammatory reactions.

The recommended practice from the manufacturer is to perform a thorough irrigation to remove excess material from the site of application once haemostasis is achieved in order to minimise inflammatory response and adhesions. Other possible complications raised by the manufacturer are nerve injuries and tissue compressions secondary to the swelling of the bovine granules which can also be minimised by the same practice.

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FREE COMMUNICATIONS ABSTRACTS SESSION A Friday 1 June

1720-1730

LAPAROSCOPIC HEMIHYSTERECTOMY FOR A RARE GENITOURINARY MALFORMATION

Patel PS, Lam A

Uterus didelphys arises when midline fusion of müllerian ducts is arrested. It accounts for approximately 11% of uterine malformations, and is the müllerian anomaly most commonly associated with renal agenesis^{1,2}.

This video case report describes the diagnosis and management of an unusual variant of the rare but well-established syndrome of uterus didelphys, obstructed hemivagina and ipsilateral renal agenesis, complicated by severe endometriosis and late onset hematometra.

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SESSION B Friday 1 June

1600-1610

MONASH MEDICAL CENTRE GYNAECOLOGICAL ENDOSCOPY UNIT: HOW OUR MULTIDISCIPLINARY ENDOMETRIOSIS CLINIC WORKS AND HOW WE TRAIN OUR FELLOWS

Druitt M, Digby A, Najjar H, Tsaltas J, Vollenhoven B

With a thought to developing one day a clinic of one's own, the model of the clinic will be discussed.

- Multi-disciplinary: Gynaecologists, fellows, trainees, residents, Naturopath (the first ever employed by a public hospital in Australia), Pain medicine specialist, COGU ultrasound service provision
- Numbers, volume, referral patterns within and without Southern Health
- Problems and funding

Unit structure, theatre lists and how we triage patients to ensure laparoscopies are operative and no time is misused.

Fellow training: a blended model in the public and private sectors.

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1610-1620

DOES NERVE SPARING EXCISIONAL SURGERY FOR ENDOMETRIOSIS REDUCE THE FUTURE RISK OF PELVIC FLOOR DYSFUNCTION?

Flemming T, Krishnan S

BACKGROUND: Surgical excision is a well established treatment for the pain and infertility of endometriosis and improves quality of life (1-3). Recently, a nerve sparing approach has been described for women with deep infiltrating endometriosis (DIE) (4;5). This approach aims to reduce post-operative pelvic floor dysfunction, particularly difficulty with voiding and evacuation of stools (4;5).

AIM: To compare pelvic floor outcomes following excision of DIE (where the inferior hypogastric plexus is at risk of damage) with outcomes following excision of endometriosis from other sites in the pelvis (the control group).

METHODS: A retrospective cohort study was performed.

Participants had excisional surgery for endometriosis between nine months and five years previously. Pelvic floor function was assessed by mailing a questionnaire comprising validated sets of questions grouped into four domains. The outcomes were scores for urinary voiding dysfunction, difficulty with evacuation of stool, urinary stress and urinary urge incontinence.

RESULTS: Of 208 questionnaires mailed, 15 were returned to sender and 66 were completed for a response rate of 34% (66/193). 40 respondents had excision of DIE and 26 had excision of endometriosis from other sites in the pelvis. The mean age was 41 years in the DIE group and 37 years in the control group (t 62 = 2.1; p = 0.04). Parity was similar in each group.

TABLE: Comparison of outcomes

Comparison	DIE group (median, IQR*)	Control group (median, IQR*)	Wilcoxon Rank sum test: z score (p value)
Voiding dysfunction score	0.5, 3.5	2.0, 4.0	0.69 (0.49)
Stool evacuation score	4.0, 2.0	4.0, 4.0	0.00 (1.0)
Urinary stress score	1.0, 3.0	0.0, 2.0	1.43 (0.15)
Urinary urgency score	1.5, 4.0	0.0, 2.0	1.08 (0.28)

* Interquartile range

CONCLUSION: There was no evidence of an association between excision of DIE and pelvic floor dysfunction. There is scope to test the efficacy of nerve sparing surgery in a randomised controlled trial.

FREE COMMUNICATIONS ABSTRACTS SESSION B Friday 1 June

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1620-1630

PRESUMED NASAL ENDOMETRIOSIS AS A CAUSE OF MENSTRUAL EPISTAXIS: SECOND CASE REPORT IN THE PEER REVIEWED LITERATURE (UMPTENTH ON GOOGLE)?

Druitt M, Tsaltas J

A 36 year-old woman presents with cyclic pain and epistaxis during menstruation in the context of past histologically proven pelvic endometriosis. This presentation will be a discussion of a pragmatic versus academic approach to such a patient and the differential diagnoses, including menstrual cyclic thrombocytopenia.

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AUTHOR AFFILIATION: M. Druitt, J. Tsaltas; Gynaecological Endoscopy Unit, Monash Medical Centre, Clayton, Victoria, Australia.

1630-1640

A MULTI-DISCIPLINARY APPROACH FOR COMPLICATED DEEP INFILTRATING ENDOMETRIOSIS

Patel PS, Pillinger S, Vass J, Lam A

OBJECTIVE: To illustrate the inherent diagnostic and surgical difficulties associated with complicated deep infiltrating endometriosis, and how they can be successfully managed using a multi-disciplinary approach.

We present the case of a 34 year-old woman with deep infiltrating endometriosis involving the rectovaginal septum, rectum and the left ureter, who underwent surgical management under the care of a gynaecologist, a colorectal surgeon and a urologist.

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1640-1650

LAPAROSCOPIC SEGMENTAL BOWEL RESECTION FOR COLORECTAL ENDOMETRIOSIS

Patel PS, Evans J, Pillinger S, Perera S, Lam A

Intestinal involvement has been estimated to occur in 8 - 12% of women with endometriosis^{1,2}. The most common sites are the rectosigmoid junction and the rectum, which together account for approximately 80% of all bowel lesions³.

OBJECTIVE: To evaluate the operative and early postoperative surgical complications of laparoscopic segmental bowel resection for colorectal endometriosis.

A longitudinal study was conducted on all consecutive patients who underwent laparoscopic treatment of severe endometriosis, including a segmental resection, by a multi-disciplinary team consisting of a gynaecologist and a colorectal surgeon, at a tertiary referral centre.

Primary outcome measure was the need for laparoconversion. Secondary outcomes included length of colon resected, estimated intra-operative blood loss, operative duration, drop in hemoglobin, and rates of: blood transfusion, ureteric or bladder injuries, admission to intensive care, postoperative bleeding, infection, anastomotic leak, rectovaginal fistulae, urinary retention, re-operation and ileostomy.



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SESSION B Friday 1 June

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1650-1700

CAN WE PREDICT POUCH OF DOUGLAS OBLITERATION USING A NEW REAL-TIME ULTRASOUND TECHNIQUE: THE 'SLIDING SIGN'

Reid S, Lu C, Casikar I, Reid G, Abbott J, Cario G, Chou D, Kowalski D, Cooper M, Condous G

OBJECTIVES: The aim of this study was to evaluate pre-operative real-time dynamic transvaginal ultrasound (TVS) in the prediction of pouch of Douglas (POD) obliteration in women undergoing laparoscopy for suspected endometriosis.

METHODS: Multi-centre prospective observational study undertaken from January 2009 to November 2011. All women with symptoms suggestive of endometriosis scheduled for laparoscopy underwent a detailed pre-operative TVS, in particular, to ascertain whether the POD was obliterated. POD obliteration was assessed using a real-time TVS technique called the 'sliding sign'. These pre-operative TVS 'sliding sign' findings were then compared to gold standard laparoscopic POD findings.

RESULTS: 100 consecutive women with pre-operative TVS and laparoscopic outcomes were included in the final analysis. Mean age was 32.8 years and mean age for diagnosis of endometriosis was 27.4 years. At laparoscopy, 84/100 (84%) were found to have some form of endometriosis (73% peritoneal endometriosis, 35% ovarian endometrioma/s, 34% deep infiltrating endometriosis). At laparoscopy, 30/100 (30%) had an obliterated POD and 20/30 (66.7%) of these women also had evidence of bowel endometriosis. The accuracy, sensitivity, specificity, positive predictive value, negative predictive value, positive likelihood ratio and negative likelihood ratio for using the real-time 'sliding sign' ultrasound technique to predict POD obliteration were 92.0%, 80.0%, 97.1%, 92.3%, 91.9%, 28.0 and 0.21, respectively.

CONCLUSIONS: Pre-operative real-time dynamic TVS evaluation of the posterior compartment using the 'sliding sign' seems to

establish whether the POD is obliterated with a high degree of certainty.

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1700-1710

THE PREDICTION OF POUCH OF DOUGLAS OBLITERATION USING OFF-LINE ANALYSIS OF THE TVS 'SLIDING SIGN': DIAGNOSTIC ACCURACY AND INTER-OBSERVER AGREEMENT

Reid S, Lu C, Casikar I, Mein B, Ludlow J, Magotti R, Benzie R, Condous G

OBJECTIVE: The aim of this study was to determine diagnostic accuracy and inter-observer agreement in predicting pouch of Douglas (POD) obliteration (secondary to endometriosis) at off-line analysis of two-dimensional (2-D) videos using the dynamic real-time TVS 'sliding sign' technique.

METHODS: 2-D videos of 30 women presenting with chronic pelvic pain were assessed "off-line" by six examiners. The sonologists viewed the TVS 'sliding sign' technique in two anatomical locations (retro-cervix and posterior uterine fundus). The POD was deemed not obliterated, if 'sliding sign' was positive in both anatomical locations (i.e. anterior rectum/recto-sigmoid glided smoothly across the retro-cervix/posterior fundus, respectively). If the 'sliding sign' was negative (i.e. anterior rectum/rectosigmoid did not glide smoothly over retro-cervix/posterior fundal region, respectively), the POD was deemed obliterated. Diagnostic accuracy and inter-observer agreement among the six sonologists was evaluated.

RESULTS: Presence/absence of POD obliteration was confirmed at laparoscopy in 19/30 (63.3%) women. Agreement (Cohen's kappa) between any two examiners in the assessment of the 'sliding sign' in both anatomical regions (anterior rectum/retro-cervix and recto-sigmoid/posterior fundal region) ranged from 0.41 - 0.90. The multiple rater agreement for the interpretation of the 'sliding sign' was higher for the retro-cervical region compared to the fundal region (Fleiss' kappa 0.54 vs. 0.37).

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Individual observers in the prediction of POD obliteration using the 'sliding sign' gave an accuracy, sensitivity, specificity, positive and negative predictive value of 75.0%-96.7%, 42.9%-100%, 64.7%-95.7%, 53.6%-100%, and 85.2%-100%, respectively.

CONCLUSION: The agreement between sonologists in evaluating the 2-D TVS 'sliding sign' for prediction of POD obliteration ranged from moderate to almost perfect agreement. Diagnostic accuracy for prediction of POD obliteration was higher for sonologists who specialised in gynaecological ultrasound.

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1710-1720

INTRA-OBSERVER AGREEMENT IN THE PREDICTION OF POUCH OF DOUGLAS OBLITERATION USING 2-D OFF-LINE ANALYSIS OF THE TVS 'SLIDING SIGN'

Reid S, Lu C, Casikar I, Mein B, Magotti R, Ludlow J, Benzie R, Condous G

OBJECTIVE: The aim of this study was to determine intra-observer agreement in predicting pouch of Douglas (POD) obliteration (secondary to endometriosis) at off-line analysis of two-dimensional (2-D) videos using the dynamic real-time TVS 'sliding sign' technique.

METHODS: Two sets of 2-D TVS videos for 30 women presenting with chronic pelvic pain were assessed "off-line" by six examiners. The second video set was randomly re-ordered and examiners had a 1-2 week window between viewing of the first and second video sets. The sonologists viewed the TVS 'sliding sign' technique in two anatomical locations (retro-cervix and posterior uterine fundus). The POD was deemed not obliterated, if 'sliding sign' was positive in both anatomical locations (i.e. anterior rectum/recto-sigmoid glided smoothly across the retro-cervix/posterior fundus, respectively). If the 'sliding sign' was negative (i.e. anterior rectum/rectosigmoid did not glide smoothly over retro-cervix/posterior fundal region, respectively), the POD was deemed obliterated. Intra-observer agreement among the six sonologists was evaluated.

RESULTS: Intra-observer agreement between the first and second video sets for the assessment of the 'sliding sign' in both anatomical regions (anterior rectum/retro-cervix and recto-

sigmoid/posterior fundal region) ranged from Kappa values of 0.58-0.95, indicating moderate to nearly perfect agreements. Intra-observer agreement for the interpretation of the 'sliding sign' was slightly higher for the fundal region (Kappa values 0.60-1.00) compared with the retro-cervical region (Kappa values 0.58-0.91). Kappa values for intra-observer variability in the prediction of POD obliteration ranged from 0.46-1, indicating moderate to nearly perfect agreements.

CONCLUSIONS: The intra-observer agreement among sonologists in evaluating the 2-D real-time TVS 'sliding sign' for prediction of POD obliteration ranged from moderate to almost perfect agreement. The intra-observer variability did not seem to be dependant upon experience or specialisation in gynaecological sonology.

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1720-1730

WHAT ARE THE SURGICAL FINDINGS ASSOCIATED WITH POUCH OF DOUGLAS OBLITERATION AT LAPAROSCOPY IN WOMEN WITH SUSPECTED ENDOMETRIOSIS?

Reid S, Lu C, Casikar I, Reid G, Abbott J, Cario G, Chou D, Kowalski D, Cooper M, Condous G

OBJECTIVE: To determine the association between various surgical findings and the presence of pouch of Douglas (POD) obliteration at laparoscopy, in women with suspected endometriosis.

METHODS: Multi-centre prospective observational study undertaken from January 2009 to November 2011. All women who underwent laparoscopy for suspected endometriosis had the presence of the following surgical features recorded: POD obliteration, ovarian mobility, ovarian cyst, ovarian endometrioma, anterior rectum/rectosigmoid nodule, and USL nodule. The association between surgical findings and the presence of POD obliteration at laparoscopy was then analysed for significance using Fisher's exact test.



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RESULTS: 100 consecutive women with laparoscopic outcomes were included in the final analysis. Mean age was 32.8 years and mean age for diagnosis of endometriosis was 27.4 years. At laparoscopy, 84/100 (84%) women had endometriosis (73% peritoneal endometriosis, 35% ovarian endometrioma/s, 34% deep infiltrating endometriosis). 30/100 (30%) had POD obliteration and 20/30 (66.7%) of these women also had evidence of bowel endometriosis. The association between surgical findings and POD obliteration at laparoscopy was significant for the following features: right and left ovarian fixation, right and left ovarian cyst, right and left ovarian endometrioma, anterior rectum/rectosigmoid nodules (p-value < 0.0001).

CONCLUSION: Several surgical findings known to be associated with endometriosis also appear to be significantly associated with POD obliteration at laparoscopy. The ability to predict these markers for endometriosis pre-operatively may alert the clinician to the possibility of difficult endometriosis surgery, and therefore further aid in the surgical planning.

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SESSION C Friday 1 June

1600-1610

COEXISTENCE OF ENDOMETRIOSIS IN WOMEN WITH SYMPTOMATIC FIBROIDS

Patel PS, Lam A

OBJECTIVE: To investigate the coexistence of endometriosis in women presenting with symptomatic fibroids.

A retrospective review of 252 consecutive patients undergoing laparoscopic myomectomy or hysterectomy at a university-affiliated tertiary referral centre.

The primary outcome measure was the presence of endometriosis. Secondly, we wished to identify any variables that predicted the coexistent endometriosis, and examine how women who had both diagnoses differed from those who had fibroids alone.

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1610-1620

LAPAROSCOPIC MYOMECTOMY: A SINGLE CENTRE'S EXPERIENCE

Patel PS, Lam A

OBJECTIVE: To evaluate the operative and immediate postoperative outcomes of laparoscopic myomectomy.

A prospective observational study was conducted on all consecutive patients undergoing laparoscopic myomectomy for symptomatic uterine fibroids by a single surgeon at a tertiary referral centre between December 2004 and March 2012.

Primary outcome measure was successful completion of the myomectomy without conversion to laparotomy. Secondary outcome measures included the number and size of fibroids removed, estimated intra-operative blood loss, operative duration, drop in hemoglobin, need for blood transfusion, postoperative bleeding and fever.

AUTHOR AFFILIATION: P. S. Patel, A. Lam; Centre for Advanced Reproductive Endosurgery (CARE), St Leonards, New South Wales, Australia.

1620-1630

OFFICE SONOVAGINOGRAPHY: REDEFINING THE CONCEPT OF A NORMAL PELVIS ON TRANSVAGINAL ULTRASOUND IN WOMEN WITH SUSPECTED ENDOMETRIOSIS

Reid S, Casikar I, Reid G, Abbott J, Cario G, Chou D, Kowalski D, Cooper M, Condous G

OBJECTIVE: To use 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: Ongoing, multi-centre prospective observational study (June 2009 - November 2011). All women included in this study were of reproductive age, had a history of chronic pelvic pain, and had a plan for laparoscopic endometriosis surgery. A history was obtained and an ultrasonographic evaluation with office SVG was performed on all women prior to laparoscopy. During SVG, 20 mL of ultrasound gel was inserted into the posterior fornix of the vagina, followed by the insertion of a transvaginal (TV) ultrasound probe. The gel created an acoustic window between the TV probe and the surrounding structures of the vagina, allowing for visualisation of the posterior compartment. SVG was used to predict posterior compartment deep infiltrative endometriosis (DIE) prior to laparoscopy. The correlation between SVG findings and laparoscopic findings was analysed to assess the ability of SVG to predict posterior compartment DIE.

RESULTS: 100 consecutive women with pre-operative SVG and laparoscopic outcomes were included in the final analysis. At laparoscopy, 84/100 (84%) women had endometriosis (73% peritoneal endometriosis, 35% ovarian endometrioma/s, 34% deep infiltrating endometriosis). 30/100 (30%) had POD obliteration and 20/30 (66.7%) of these women also had evidence of bowel endometriosis. The sensitivity, specificity, PPV and NPV for SVG in the prediction of midline posterior compartment DIE (rectovaginal, retrocervical and rectosigmoid nodules) was 78.3%, 90.9%, 72.0% and 93.3%, respectively. The sensitivity, specificity, PPV and NPV for SVG in the prediction of lateral DIE (uterosacral ligament nodules) was 40.0%, 95.6%, 50.0% and 93.5%, respectively.

CONCLUSION: SVG demonstrated a high specificity/NPV, i.e. correlates highly with a "normal pelvis". Office SVG provides additional diagnostic information to conventional pelvic sonography, which allows for the planning of specific endometriosis surgery and the need for colorectal input.



FREE COMMUNICATIONS ABSTRACTS

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AUTHOR AFFILIATIONS: S. Reid¹, I. Casikar¹, G.Reid², J. Abbott^{3,4}, G. Cario⁵, D. Chou⁵, D. Kowalski⁴, M. Cooper^{6,7}, G. Condous¹;
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1630-1640

CLINICAL OUTCOMES AFTER LAPAROSCOPIC MYOMECTOMY: A RETROSPECTIVE ANALYSIS

Burton AE, Lyons SD

Laparoscopic myomectomy is now well established as a treatment option for management of uterine leiomyomata. Despite its increasing uptake in Australia, there is limited data about long-term outcomes of the procedure, particularly with regards to recurrence (of both symptoms and pathology) and fertility.

This retrospective case series reviewed 98 women who underwent laparoscopic myomectomy at a tertiary referral centre for advanced gynaecological endoscopy. Self-reported data on symptoms before and after laparoscopic myomectomy were obtained for 25 women. The severity of symptoms was lower ($p < 0.05$) at follow-up than prior to surgery for dysmenorrhea, menorrhagia, length of period, clots with period and trouble with pressure symptoms.

In 27 women who had pelvic ultrasound after surgery the rate of recurrence was 70% (median time to follow-up 22 months, range 4-86). The recurrence rate we observed is considerably higher than the range of crude recurrence rates of 22 - 33% reported in other studies of laparoscopic myomectomy^{1,2,3}. The difference may relate to a selection bias in our study but also to the long follow-up period and specialised gynaecological imaging used in our analysis.

There were 17 pregnancies in 13 women after surgery. Ten of these were in patients with a history of primary or secondary infertility prior to surgery.

We also observed that the symptom relief provided by laparoscopic myomectomy may not be long-term. When follow-up was limited to 36 - 60 months ($n = 8$) or > 60 months ($n = 8$), a significant improvement was only recorded for dysmenorrhea.

There was a low rate of morbidity in the immediate postoperative period. Median blood loss was 100 ml (range 10 - 1000 ml),

median length of surgery was 120 minutes and mean hospital stay was 48 hours. Only one patient required laparoconversion.

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AUTHOR AFFILIATION: A. E. Burton, S. D. Lyons; Department of Endo-Gynecology, Royal Hospital for Women, New South Wales, Australia.

1640-1650

NOVASURE ENDOMETRIAL ABLATION SYSTEM - AN AUDIT OF SAFETY, EFFECTIVENESS AND PATIENT SATISFACTION

Francis C, Behrens R, Loudon K.

OBJECTIVES: To assess the safety, effectiveness and patient satisfaction of NovaSure impedance controlled endometrial ablation system in real life usage.

To examine the risk factors of those patients whose treatment failed, to enable us to better advise patients regarding treatment options. To assess adherence to product guidelines in so far as they relate to contraception and endometrial biopsy.

DESIGN: The study was a retrospective analysis of patient notes and a patient symptom and satisfaction questionnaire.

METHODS: 188 NovaSure procedures were performed from 1/10/2008 - 1/10/2010 on pre-menopausal women with symptomatic menorrhagia. Follow up was between two years, 11 months to 11 months, (median of 13 months; mean - 24.73 months). The study involved review of 186/188 patient notes available for review and 69% response rate was achieved from the questionnaire.

RESULTS: Of the women who underwent the procedure, 91.9% of women achieved subjective intra-operative success. Operative failures were attributed to technical failure, unsatisfactory ablation and failed cavity safety checks.

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No patients required further intraoperative procedures due to complications.

100% of patients achieved same day discharge. 5.85% of patients suffered a complication. 3% of patients were readmitted: two with pain and two with sepsis.

Within the study period, 12 patients required a hysterectomy: 22% < 35, 9.7% 35-40, 7.14% 40-45, 3% >45. The average time between use of the Novasure ablation and hysterectomy was 7.2 months. Hysterectomy was required for on-going menorrhagia: 25%, Pain: 41.6%, Abnormal histology: 8%, Failed procedure: 16%

61% responders reported amenorrhoea, 33% improved bleeding, 5% unchanged, 1% worse. Over 75% had no dysmenorrhoea post procedure versus <10% pre-procedure.

CONCLUSIONS: The study revealed that the procedure was safe and simple and had a high intra-operative success and a low complication rate. The procedure enabled successful symptom control, improving both pain and bleeding for most patients.

Only a small number of patients subsequently required a hysterectomy. Patients demonstrated general satisfaction with the procedure, which therefore reduced the need for more invasive and expensive treatments. It is difficult to predict which patients will not have a successful outcome, however it appears more likely in younger patients, those with a raised BMI or pre-existing pain or endometriosis.

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1650-1700

LAPAROSCOPIC MYOMECTOMY FOR FIBROIDS THAT PROTRUDE IN AND OUT

Choi S, Cario G, Rosen D, Reyftmann L, De Rosnay P, Baghlaf O, Chou D.

BACKGROUND: Myomectomy is a treatment option for women with symptomatic leiomyomas who want conservative surgery. However, laparoscopic myomectomy can be technically challenging, especially in cases with multiple, large fibroids. It is further complicated when a significant intracavity component is present. The video presentation demonstrates a case of laparoscopic myomectomy and the hysteroscopic views before and after the procedure.

CASE: A 42 year-old lady presented with long-standing menorrhagia and profound anaemia with a haemoglobin level of 51g/L. Total abdominal hysterectomy had been offered but she was keen to preserve the uterus. She once had a Mirena but it was soon expelled. Physical examination revealed an 18 week-sized uterus. Ultrasound scan showed multiple uterine fibroids, with the largest one measuring 6cm in diameter in the right lower segment. Laparoscopic myomectomy was arranged for her.

Hysteroscopic examination prior to laparoscopy showed a large fundal fibroid bulging into the uterine cavity, and a posterior fibroid with significant intracavity component at the lower segment. Under laparoscopy, uterine arteries on both sides were ligated. Myomectomy was performed after infiltration of Marcaine-adrenaline injection solution 0.5%-1:200,000. Uterine cavity was entered and the submucosal component of uterine fibroids could be identified at an early stage. The endometrium was clearly seen and apposed in an individual layer. The myometrial defects were repaired with V-Loc. A total of three fibroids ranging from 4 to 6 cm in diameter were excised. Hysteroscopic examination after myomectomy showed a normal-looking uterine cavity. An endometrial defect representing the repaired site at endometrium could be visualised.

CONCLUSION: Techniques in laparoscopic myomectomy for multiple large fibroids with significant submucosal component were demonstrated. Hysteroscopic examination helps to assess intracavity involvement of uterine fibroids before laparoscopic myomectomy.

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1700-1710

THE INCIDENCE OF ENDOMETRIAL MALIGNANCIES IN PATIENTS ATTENDING OUTPATIENT HYSTEROSCOPY IN WESTERN AUSTRALIA: PREVALENCE AND RISK FACTORS.

Lee H, Beard A, Karthigasu K, McElhinney B, Hart R

OBJECTIVE: To estimate the prevalence of endometrial hyperplasia and malignancy in patients with a history of abnormal uterine bleeding or an incidental finding of increased endometrial thickness on USS attending an outpatient hysteroscopy clinic. Risk factors for endometrial pathology were also assessed.



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METHODS: A retrospective chart audit of 181 patients that underwent outpatient hysteroscopy at King Edward Memorial Hospital from the period 1st January 2011 to 31st December 2011. In all patients, an endometrial Pipelle sample was obtained and the uterine cavity was inspected. If the endometrial cavity looked abnormal, the patient underwent a formal hysteroscopy and curettage under general anaesthesia. Intraoperatively, visible polyps and endometrial curettings were sent for formal histopathology assessment.

RESULTS: Seven of the patients (3.9%) were diagnosed with endometrial cancer. Four patients were diagnosed by Pipelle alone, three by hysteroscopy/curettage. The histology report on the Pipelle samples from the three patients subsequently identified to have malignant curettings did not show malignant features. Seven patients (3.9%) were diagnosed with endometrial hyperplasia; none of which were diagnosed by the initial Pipelle sample. One hundred and thirty-one patients (72%) had benign histology. Thirty-six patients (20%) had insufficient amount of tissue or 'inconclusive' samples. Thirty of these (83%) were Pipelle specimens (hysteroscopy only), and six (17%) had both Pipelle and endometrial curettings at time of hysteroscopy.

At the time of out-patient hysteroscopy, seventy-six patients (42%) were found to have endometrial polyps, polypoidal endometrium or the endometrium appeared abnormal. These patients went on to have a formal hysteroscopy and curettage.

All endometrial cancers were found in the group of patients who had abnormal outpatient hysteroscopy findings. Independent variables that were significantly related to endometrial hyperplasia and malignancy included obesity, increased endometrial thickness on ultrasound scan, menopause status and abnormal uterine bleeding.

CONCLUSION: 4% of patients were diagnosed with endometrial cancer, and 4% with hyperplasia. Clinical parameters that increased the risk of malignancy and hyperplasia included endometrial thickness, menopause status, postmenopausal bleeding, and obesity.

AUTHOR AFFILIATION: H. Lee, A. Beard, K. Karthigasu, B. McElhinney, R. Hart; King Edward Memorial Hospital, Subiaco, Western Australia, Australia.

1710-1720

FIMBRIAL EXTRUSION OF ENDOTUBAL ISTHMIC PLUGS CAPTURED ON VIDEO

Lee S, Soo S, Ang C

INTRODUCTION: It is a commonly held belief that clear to yellow mucus-like material commonly found in the Pouch of Douglas on laparoscopy performed after diagnostic hysteroscopy is tubal in origin. Endotubal isthmic plugs were first described by Kerin in 1991 on fallopscopy and then retrieved laparoscopically. One such endotubal isthmic plug was found histologically to consist of a cast of debris containing aggregates of histiocyte-like cells of endometrial stromal or mesothelial origin. These plugs are believed to be a cause for reversible tubal occlusion. Real-time videos of endotubal isthmic plugs extruding from Fallopian tubes captured using simultaneous laparoscopy and hysteroscopy are shown in this presentation.

AIM: To demonstrate through simultaneous laparoscopy and hysteroscopy that the clear to yellow mucus-like material commonly found in the Pouch of Douglas is endotubal in origin, containing histiocyte-like cells.

METHOD: In patients requiring hysteroscopy and laparoscopy, rather than the usual procedure of performing hysteroscopy first and laparoscopy second, the laparoscope is inserted first and then fluid hysteroscopy is performed with simultaneous laparoscopic view of the pelvis. Two laparoscopy towers are required. The endotubal isthmic plug is collected and sent for histological examination.

RESULTS: Real-time extrusion of endotubal isthmic plugs from the lumen of Fallopian tubes in multiple patients during fluid hysteroscopy is observed laparoscopically and captured on video. Histological examination of these plugs confirms that these plugs contain inflammatory histiocytic cells.

CONCLUSION: The extrusion of endotubal isthmic plugs from tubal lumens is captured for the first time on video. This finding strengthens the commonly-held belief that the mucus-like material in the Pouch of Douglas after hysteroscopy is tubal in origin and a cause of reversible tubal occlusion. This project serves as a pilot study for futures studies into the significance of endotubal isthmic plugs.

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1600-1610

REPORT ON AGES/COVIDIEN TRAVELLING FELLOWSHIP 2009

Wang L

The AGES travelling fellowship award is a great opportunity for young fellows to travel and experience medical advances overseas in ways not available to many. I had the privilege of travelling to Florida USA in 2010, to visit Dr Arnold Advincula, one of the world's foremost experts in robotic surgery. I had the pleasure of observing him in action on a daily basis at his hospital in Celebration, Florida, as well as participating in his innovative developments of new technologies.

It is also one of the main centres for robotic surgical training on the da Vinci simulator, and my experience on it has given me a new perspective on the challenges and advantages of robotic surgery.

In addition, the opportunity to attend the World Congress on Robotic Surgery, based in the well-known Disney World Resort was an added bonus. I will present my experience during these two weeks in Florida.

AUTHOR AFFILIATION: L. Wang; Sydney West Area Health Service, Sydney West Advanced Pelvic Surgery, Western Sydney, New South Wales Australia.

1610-1620

LAPAROSCOPIC ASSISTED MINILAPAROTOMY HYSTERECTOMY FOR HUGE POSTERIOR LOWER SEGMENT FIBROID CAUSING BILATERAL URETERIC OBSTRUCTION RESULTING IN ACUTE RENAL FAILURE IN A 30 YEAR-OLD NULLIPAROUS LADY

Choi S, Cario G, Rosen D, Reyftmann L, De Rosnay P, Baghlaf O, Condous G, Brown M, Chou D

Although uncommon, large uterine leiomyoma, especially when located at cervical region, may incidentally compress the urinary tract organs, causing obstructive nephropathy. In such cases, total hysterectomy is warranted but technically challenging. This is a surgical video presentation of a laparoscopic-assisted minilaparotomy hysterectomy for a large cervical leiomyoma causing bilateral hydronephrosis and moderate renal derangement.

A 30 year-old nulliparous lady, in same sex relationship, presented with repeated episodes of acute urinary retention and an immobile 22 week-sized uterus. Ultrasound scan showed bilateral hydronephrosis and a posterior cervical fibroid

measuring 19x15x11cm with cystic degeneration impacted in the pelvis. The estimated volume of the fibroid was 1728ml.

Her creatinine level elevated to 136 umol/L. A nephrostogram confirmed bilateral lower ureteric obstruction. Double-J ureteric stents and nephrostomy drains were inserted to both sides by interventional radiologist.

On examination under anaesthesia, a large posterior cervical fibroid expanding the posterior vaginal wall pushed the cervix not only anteriorly but also superiorly, cephalad to the pubic symphysis. The markedly displaced cervix rendered extremely limited vaginal uterine manipulation.

Laparoscopy examination showed that the cervical fibroid was occupying the whole pelvic cavity, expanding retroperitoneally over the pelvic side walls into the rectovaginal space. Superiorly it extended to above the pelvic brim and over the sacral promontory. The lower segment was distended to the whole width of the pelvis. The lack of mobility of this difficult fibroid caused major challenge. After dividing the upper pedicles of the uterus, bladder dissection was carried out cautiously in the context of very distorted anatomy.

Bilateral uterine arteries was carefully searched, thoroughly dissected and ligated with LigaClip. The fibroid was partially freed from the retroperitoneal attachment, followed by debulking with amputation across the lower segment using laparoscopic knife.

Through a 6cm transverse suprapubic minilaparotomy incision, the specimen was delivered, and the remaining part of cervical fibroid and cervix was excised. The patient made uneventful postoperative recovery, and her creatinine level returned to normal a few days later. The nephrostomy tubes and stents were removed shortly after the hysterectomy.

AUTHOR AFFILIATION: S. Choi, G. Cario, D. Rosen, L. Reyftmann, P. de Rosnay, O. Baghlaf, G. Condous, M. Brown, D. Chou; Sydney Women's Endosurgery Centre (SWEC), St George Private Hospital, Kogarah, New South Wales, Australia.

1620-1630

MALIGNANT PERITONEAL MESOTHELIOMA: AN UNEXPECTED FINDING

Smith CJ, Chow JSW, Merkur H, Hardas G, Hogg R

INTRODUCTION: Malignant peritoneal mesothelioma (MPM) accounts for 10 to 15 percent of all cases of mesothelioma and is known to have a female predominance¹. It arises from the mesothelial cells lining the peritoneum and aggressively spreads within the confines of the abdominal cavity causing significant morbidity and mortality.



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Although MPM shares asbestos exposure as the predominant risk factor, it is thought to have a different molecular pathogenesis than the more common pleural variant². There are no specific signs or symptoms of disease, meaning the majority of MPM cases will present with diffuse peritoneal involvement³.

OBJECTIVE: We will present an interesting gynaecological case study to highlight an unusual presentation of this rare disease. Our discussion will focus on the clinical presentation, imaging features, histopathological diagnosis, and surgical staging.

We will also review the general principles of management, as well as discuss the various treatment options including cytoreduction surgery, intra-peritoneal chemotherapy, systemic chemotherapy, and molecularly targeted therapy.

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AUTHOR AFFILIATION: C. J. Smith, J. S. W. Chow, H. Merkur, G. Hardas, R. Hogg; Sydney West Advanced Pelvic Surgery Unit, Western Sydney, New South Wales Australia.

1630-1640 LAPAROSCOPIC STAGING OF BORDERLINE TUMOURS (WITH TRANSVAGINAL APPENDICECTOMY)

Acton J, Salfinger S

Staging of borderline tumours can present a challenge from a laparoscopic point of view. In addition specimen retrieval can present a problem. This video presentation highlights some novel approaches to minimal access staging of borderline tumours including laparoscopic omentectomy and transvaginal appendicectomy.

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2. St John of God Hospital, Subiaco, Western Australia, Australia.

1640-1650 COMPLICATIONS OF LAPAROSCOPIC HYSTERECTOMY: THE MONASH EXPERIENCE (DATA FROM 2008 - 2012)

Myers C, Tsaltas J, Lawrence A, Pearce S, Najjar H, Dr Weng Chan KW, Wang L

The senior laparoscopic surgeons from Monash Medical Centre in Victoria have been auditing the outcomes from the laparoscopic hysterectomies since 1994. This data has twice been published in the ANZJOG. The numbers presented here are the ongoing audit data from 2008 - 2011. We have looked at and analysed any serious complications, including one death. The analysis includes all public TLHs and any private TLHs done by the laparoscopic surgeons.

We have compared our data to that collected by similar groups around Australia and the World and present a review of current relevant literature.

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2. Tsaltas J, Lawrence A, Complications of laparoscopic hysterectomy: the Monash Experience, *Aust N Z J Obstet Gynaecol*, 2002; 42: 3: 295

AUTHOR AFFILIATION: C. Myers, J. Tsaltas, A. Lawrence, S. Pearce, H. Najjar, K. W. Chan, L. Wang; Monash Medical Centre, Clayton, Victoria, Australia.

1650-1700 ENDOMETRIOSIS MIMICKING OVARIAN MALIGNANCY: A CASE REPORT

Patel PS, Lam A

Transvaginal ultrasonography is considered the first-line imaging modality to evaluate pelvic or abdominal symptoms in reproductive-age women. When an adnexal mass is discovered, serum marker CA 125 levels are often obtained despite their poor specificity and positive predictive value in this age group. However, there is a concern for malignancy when the levels are markedly elevated (> 200 U/mL), and it is recommended that such women be referred to a gynaecologic oncologist¹.

This video presentation reports the case of a 40 year-old nulliparous woman with new onset constant abdominal pain, bloating, bilateral adnexal masses and a CA 125 level of 2,113 U/mL, who was found to have severe endometriosis at the time of surgery.

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REFERENCE:

1. American College of Obstetricians and Gynecologists. Management of adnexal masses. *Obstet Gynecol.* 2007;110(1):201-214.

AUTHOR AFFILIATION: P. S. Patel, A. Lam; Centre for Advanced Reproductive Endosurgery (CARE), St Leonards, New South Wales, Australia.

1700-1710

UNSUSPECTED UTERINE LEIOMYOSARCOMA: TWO CASE REPORTS

Patel PS, Lam A

We present two cases of women who underwent laparoscopic myomectomy for presumed fibroids to emphasise the problems encountered with the early diagnosis of uterine leiomyosarcoma.

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1710-1720

THE CONUNDRUM OF THE LARGE OVARIAN CYST: WHAT IS THE BEST MANAGEMENT?

Smith CJ, Lyons SD

INTRODUCTION: One of the challenges in the management of adnexal masses is deciding on the most appropriate surgical approach. Laparoscopy is often preferred due to a reduction in post-operative pain, post-operative complications and length of hospital stay¹. The major concern with this approach is the potential for tumour spill from ovarian cyst rupture if an unexpected malignancy is encountered. Thorough assessment of the likelihood of malignancy through careful clinical and sonographic pre-operative evaluation is therefore essential.

Historically, large ovarian masses were considered more likely to be malignant. However this relationship has not been established, with evidence suggesting there is no significant difference in size between malignant and benign masses². Whilst laparoscopy remains the preferred surgical approach for large ovarian masses, at least in the first instance, this approach is often associated with a number of additional difficulties. These included the risk of cyst rupture with veress needle or primary trocar insertion, restricted operative access, and spillage of cyst contents during removal of the cyst³.

OBJECTIVE: To address these issues, we will present an interesting case of a 22 year-old nullipara with a simple

5 litre ovarian cyst, unexpectedly found to be a borderline tumour. We will also review the literature regarding the optimal management of large ovarian cysts.

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AUTHOR AFFILIATION: C. J. Smith¹, S. D. Lyons²; 1. Sydney West Advanced Pelvic Surgery Unit, Western Sydney, New South Wales Australia. 2. The Mater Clinic, North Sydney, New South Wales, Australia.

1720-1730

LAPAROSCOPIC HYSTERECTOMY, IMPLICATIONS OF PORT SIZE

Acton J, Salfinger S

BACKGROUND AND AIM: The use of smaller ports for operative laparoscopy and the subsequent decrease in total incision size may have implications for post operative pain relief and duration of hospital stay. We proposed that using a 5mm umbilical port instead of 10/12mm umbilical port would decrease analgesia requirement, hospital stay and return to normal activity. This is because of the use of a smaller incision and the lack of need for a sheath stitch.

METHOD: This retrospective study a series of 350 consecutive cases of total laparoscopic hysterectomy. The cases using 5mm umbilical port and 10/12mm umbilical ports were compared. End points assessed included, duration of procedure, complications, analgesia use, hospital stay and return to normal activity.

RESULTS AND CONCLUSIONS: There was a decrease in required analgesia. Likewise hospital stay and return to normal activity were significantly decreased. We concluded using only 5mm ports for a laparoscopic hysterectomy decreases hospital stay and return to normal activity without increasing operative time or complications.

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SESSION E Friday 1 June

1600-1610

REPORT ON AGES/COVIDIEN TRAVELLING FELLOWSHIP 2008: A SLICE OF FRANCE AT IRCAD

Kroon B

In 2008 I was the recipient of the AGES/Covidien Travelling Fellowship. I used this grant to attend a course on 'current techniques in the treatment of severe endometriosis' held at the IRCAD Laparoscopic training centre at the University of Strasbourg, France.

This was an incredibly beneficial course, and I am very grateful to AGES/Covidien for the opportunity to have had this educational experience.

AUTHOR AFFILIATION: B. Kroon; Eve Health Southbank, Queensland, Australia. Queensland Fertility Group, Brisbane, Queensland, Australia.

1610-1620

LAPAROSCOPIC REPAIR OF VAGINAL VAULT DEHISCENCE FOUND INCIDENTALLY DURING LAPAROSCOPY FOR SUSPECTED PELVIC ABSCESS (POST TOTAL LAPAROSCOPIC HYSTERECTOMY)

Cario G, Rosen D, Chou D, Reyftmann L, de Rosnay P, Choi C, Baghrif O

INTRODUCTION: Dehiscence of the vaginal vault, although relatively uncommon, is associated with significant morbidity. Fatalities are rare but can occur in the context of overwhelming sepsis or heavy vaginal bleeding. Abdominal or pelvic contents may be expelled, with bowel evisceration potentially leading to peritonitis, bowel injury, necrosis and sepsis¹. The condition has arisen after every type of hysterectomy although most cases have been reported following total laparoscopic hysterectomy.

Patients may present with one or a number of symptoms including a mass protruding through the vagina, bleeding, discharge, vague abdominal pain, bowel associated symptoms or pneumoperitoneum².

Vault dehiscence can occur a few days to a few years following hysterectomy. Several factors have been postulated to contribute to this condition. These include poor surgical technique, post-operative wound haematoma and infection, post-menopausal status, any activity resulting in increased intra-abdominal pressure, early resumption of sexual activity, chronic use of steroids, previous radiotherapy, smoking and medical conditions causing immunocompromise e.g. diabetes mellitus³.

SUMMARY: We provide video footage and a case report of a woman presenting with clinical features and imaging suggestive of pelvic infection following total laparoscopic hysterectomy. She underwent laparoscopy, which revealed bowel adherent to the vaginal vault. Vault dehiscence was discovered incidentally following adhesiolysis and dissection.

CONCLUSION: The vast majority of cases of vault dehiscence reported in the literature have been managed vaginally but this video demonstrates the restoration of normal pelvic anatomy as well as debridement and resuturing of the vault laparoscopically.

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AUTHOR AFFILIATION: G. Cario, D. Rosen, D. Chou, L. Reyftmann, P. de Rosnay, C. Choi, O. Baghrif; Sydney Women's Endosurgery Centre (SWEC), St George Private Hospital, Kogarah, New South Wales, Australia.

1620-1630

PINNACLE® ANTERIOR/APICAL PELVIC FLOOR REPAIR KIT: INITIAL EXPERIENCE AT THE SYDNEY WOMEN'S ENDOSURGERY CENTRE.

Cario G, Rosen D, Chou D, Reyftmann L, de Rosnay P, Choi S, Baghrif O

INTRODUCTION: The Pinnacle Pelvic Floor Repair Kits were introduced to offer Level I support, which provides suspension of the vaginal apex to the sacrospinous ligament in addition to Level II support. Other stated benefits include the elimination of blind trocar passes as well as facilitating full mesh adjustability through the protective sleeves.

The mesh is composed of monofilament polypropylene, is macroporous (pore size = 1450 microns) with a fibre diameter of 100 microns.

There are three kits: PINNACLE ANTERIOR-APICAL, PINNACLE POSTERIOR and PINNACLE DUET™. The Anterior/Apical mesh implant has two legs on each side for attachment to the sacrospinous ligament and arcus tendineus.

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OBJECTIVE: To evaluate outcomes in patients who underwent vaginal repair with the Pinnacle Anterior/Apical pelvic floor kit in a tertiary level centre.

METHODS: The procedures were conducted by the three principal surgeons in our unit and patients were identified using the SWEC database. Objective assessment of prolapse was carried out both pre and post-operatively using the pelvic organ prolapse quantification (POP-Q) scale and patients were asked to complete quality of life questionnaires. Any subjective change in prolapse symptoms following mesh repair was documented and included as part of outcome measures.

RESULTS: Outcomes are graded according to differences in POP-Q scores pre and post-mesh repair. These are illustrated in graphical form with stage 0 or 1 defined as objective cure.

Other parameters such as operating time and estimation of blood loss are included.

Both intra- and post-operative complications are highlighted. These included haemorrhage, infection, visceral injury, dyspareunia, bladder and bowel related problems, and mesh erosion.

CONCLUSION: The use of the Pinnacle Anterior/Apical pelvic floor repair kit is an effective option with low complication rates.

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1630-1640

LAPAROSCOPIC MESH SACROCOLPOPEXY IN COMBINATION WITH ANTERIOR ELEVATE VAGINAL MESH REPAIR FOR A VERY LARGE COMPLETE PROCIDENTIA IN A PATIENT WITH BLADDER EXSTROPHY

Chou D, Choi S, de Rosnay P, Cario G, Rosen D, Reyftmann L, Baghraf O.

Bladder exstrophy is a rare congenital developmental anomaly of anterior abdominal wall characterised by not only defect in anterior abdominal wall musculature but also absence of pubic symphysis and anterior bladder wall, which often also affects urethra and external genitalia.

The most striking external appearance is the exteriorised posterior bladder wall and the management is surgical correction. Patients with bladder exstrophy are particularly prone to genital prolapse due to their disrupted anatomy.

We present the surgical management of a 59 year-old lady with previous history of bladder exstrophy presenting with very large procidentia for 20 years. Her severe prolapse in the presence of a very distorted anatomy provided challenges to many different surgical repair options including distorted urethral support from absent pubic arch for TVT, absence of medial border of obturator foramen for trans-obturator slings, expected scarring in the "retropubic" space and absence of superior pubic rami thus Copper's ligament for paravaginal repair and colposuspension.

An anterior colporrhaphy with native tissue suture repair was obviously not adequate to deal with her anterior compartment. We have therefore chosen to perform a laparoscopic subtotal hysterectomy, sacrocolpopexy in combination with Anterior Elevate vaginal mesh repair plus an extensive posterior colpoperineorrhaphy.

We commenced her repair with Anterior Elevate with a modification of the mesh by a dorsal extension with a 5cm wide strip of GynaeMesh, which was rolled up and closed behind the vaginal mucosa at the cervical vaginal junction at the completion of Anterior Elevate repair. We have not secured the dorsal aspect of the Anterior Elevate mesh to the sacrospinous ligament as per standard procedure.

The extension was later retrieved under the bladder laparoscopically and used as the anterior arm of sacrocolpopexy procedure. This modified Ant Elevate mesh, which was attached at the level of bladder neck provided support long the entire length of the anterior vaginal wall and was dorsally joined to the posterior mesh arm of sacrocolpopexy that was secured to sacral promontory. We will share what we have learned in this innovative combination.

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1640-1650

LAPAROSCOPIC PARAVAGINAL REPAIR – DILEMMAS WITH ANALYSIS OF FOLLOW-UP DATA >5 YEARS

O'Shea R, Bedford N, Seman E, Behnia-Willison F, Kierse M

Vaginal paravaginal repair for anterior compartment prolapse was first described in 1909. Subsequent developments included the abdominal approach and more recently the laparoscopic approach. From 1999 to 2006 laparoscopic paravaginal repair (n=225) was our treatment of choice for anterior compartment prolapse. We have previously published our early experience.



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All patients were objectively assessed using the Pelvic Organ Prolapse Quantification system (POPQ) pre-operatively and subsequently at 6 weeks, 6 months and annually thereafter. Objective follow-up POPQ data was obtained in 106 cases.

The parameters for success compared were National Institute of Health Criteria (POPQ \geq -1 in the anterior compartment), Ba>0 and Reoperation for failure in the anterior compartment. We present our results at 1, 3 and 5 years. The probability of a successful repair using the NIH Criteria were 64% (1 year) falling to 26% (5 years). However, utilising Ba>0 the probability of a successful repair at one year was 96% and 76% at 5 years.

If reoperation for failure in the anterior compartment is used for assessment, the probability of a successful repair at one year was 94% and 74% at 5 years. Procedures performed included anterior colporrhaphy (suture), colporrhaphy with synthetic or porcine graft and total vaginal mesh procedures.

NIH criteria for prolapse success would appear to be unrealistic. However, the Ba>0 and reoperation rates appear to be much more representative of success in pelvic floor surgery. Using these criteria, laparoscopic paravaginal repair appears to be a viable and efficacious procedure for the longterm.

This study represents the largest group of laparoscopic paravaginal repair cases in the literature. Our objective follow-up beyond a 5 year period using these objective criteria is totally unique.

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1650-1700

LAPAROSCOPIC GLOBAL PELVIC FLOOR REPAIR: LAPAROSCOPIC TOTAL HYSTERECTOMY, SACROCOLPOPEXY, PARAVAGINAL REPAIR AND COLPOSUSPENSION

Chou D, Reyftmann L, Cario G, Rosen D, Choi S, de Rosnay P, Baghlaf O

Surgical techniques are constantly refined as we improve our understanding of anatomy and outcomes and realisation of ergonomic of surgical choreography. There are also never ending new ranges of laparoscopic instrumentations with potential to facilitate surgical procedures.

Over the last several years, laparoscopic sacrocolpopexy has become one of our preferred procedures for pelvic organ prolapse surgery and with time the techniques has evolved together with changes in the instrumentations utilised. We would like to share our technique in this video presentation.

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1700-1710

SURVEILLANCE CYSTOSCOPY IN PELVIC FLOOR REPAIR - IS IT WORTH THE TROUBLE?

Francis C, O'Shea R, Bedford N, Seman E, Benia-Willison F

Urinary tract injuries are an uncommon but recognised complication of surgery for POP. The true incidence of these complications is uncertain, however, it is understood that injuries recognised and repaired intra-operatively decreases the chance of post-operative morbidity, re-operation and potentially, medico-legal action.

Therefore, improving intraoperative recognition of these injuries is an important aim. One method postulated, is to perform routine cystoscopy following any pelvic organ prolapse (POP) surgery. Some data exists regarding the value of cystoscopy following hysterectomy but there is little to help us assess whether routine intraoperative cystoscopy does improve early detection of complications in POP surgery and consequently improve outcomes.

We present a review of current literature and a retrospective analysis of our data showing the incidence of urinary tract injury from prolapse surgery at a single tertiary referral unit, where routine cystoscopy was performed for all pelvic floor repairs, between 1999 and 2011.

RESULTS: A total of 744 laparoscopic/vaginal pelvic floor repairs were performed. 224 vaginal only repairs. There was a total of 20 (2%) bladder injuries from laparoscopic repairs. 16 during paravaginal repair, (13 having had a prior hysterectomy) and two during laparoscopic mesh sacrocolpopexy (SCP).

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There were two (0.5%) bladder injuries during vaginal repairs.

One ureteric injury occurred during uterosacral colpopexy. All injuries were diagnosed intra-operatively.

CONCLUSION: Cystoscopy is a safe, easy, fast and inexpensive adjunct to pelvic floor surgery to improve intraoperative detection of bladder injuries. All gynaecologists should be proficient with this procedure and consider cystoscopy for all pelvic floor surgery.

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1710-1720

AN UNUSUAL CASE OF SEVERE UTEROVAGINAL AND RECTAL PROLAPSE IN A 22 YEAR-OLD WOMAN

Patel PS, Schnitzler M, Lam A

This video presentation aims to illustrate the technique of laparoscopic mesh sacrohysteropexy and rectopexy as a combined procedure in a 22 year-old woman with premature ovarian failure.

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SESSION F Friday 1 June

1600-1610

REPORT ON AGES TRAVELLING FELLOWSHIP 2011: ROBOTIC SURGERY

Law K

In 2011, I was honoured to be awarded an AGES/Covidien Travelling Fellowship to visit the USA. The theme of my travelling fellowship was robotic surgery. I first developed an interest in robotic surgery in 2010 when I undertook a one-year fellowship in gynaecological oncology in Hong Kong.

For complex oncological procedures such as radical hysterectomy and para-aortic lymphadenectomy, we found that the improved dexterity due to the extra dimension of articulation, and the precision offered by the tremor filtration system and three-dimensional depth of vision, can enhance our ability to perform the surgery safely and efficiently.

Returning to Australia in 2011, I was privileged to gain great experience in advanced conventional laparoscopic and hysteroscopic surgery, under the supervision of A/Prof Jason Abbott, Prof Thierry Vancaillie, Dr Stephen Lyons and Dr Surya Krishnan. We do not have a robot (yet) in our unit in Sydney, but having operated with such great mentors throughout the year in performing complex gynaecological surgery using conventional laparoscopy, I have come to the conclusion that great surgery certainly can be done without the use of robotics.

Whilst I could sit down and have a cup of coffee as I use the robotic surgical system to perform a simple total laparoscopic hysterectomy, I could finish the same operation faster using conventional laparoscopy, at a fraction of the cost.

However, when I attended various international conferences on minimally invasive gynaecology, I quickly came to realise that there is an increasing trend to use robotics for many benign gynaecological conditions, especially in the US. Is it really necessary and justifiable? Is it consumer-driven, surgeon-driven, industry-driven, or a combination of the above? To answer these questions, I undertook the AGES Travelling Fellowship to experience first-hand what is happening in the US.

At the end of my Travelling Fellowship, having experienced first-hand the use of robotics in the USA and in Hong Kong, I think robotic surgery certainly has a role in specific cases for specific surgeons. However, the advantages of improved dexterity and vision must be balanced against the cost and availability of robotic surgery.

This Travelling Fellowship has been of tremendous educational value, and I would encourage trainees interested in minimally invasive surgery to apply for these fellowships in the future, and I am truly grateful to Covidien and AGES for providing me the opportunity to undertake this fellowship.

AUTHOR AFFILIATION: K. Law; Royal Hospital for Women, Randwick, New South Wales, Australia.

1610-1620

SKEPTICISM OF DE-TORTING LARGE OVARIES

Georgiou C

A 22 year-old nulliparous woman presents to the Emergency Department in the middle of her regular 28 day cycle with sudden onset right iliac fossa post coital pain. She is discharged with a diagnosis of bilateral endometriomas based on her USS demonstrating bilaterally enlarged ovaries of 4cm and 3cm (containing multiple echogenic foci. She represents two days later with again post-coital lower abdominal pain, this time with vomiting and an acute abdomen.

A repeat USS suggests features of appendicitis and she was taken to theatre for a diagnostic laparoscopy as her clinical presentation also suggested torsion of the ovary. At laparoscopy she had a partially torsed 6cm left ovary and an 8cm torsed haemorrhagic, purple-coloured right ovary with omental adhesions to the surface.

Due to her age and parity, detorsion of the right ovary was performed whilst the left ovary was also detorted and three ovarian dermoids were removed.

A follow-up USS confirmed the presence of a suspected dermoid in the right ovary and a repeat laparoscopy was scheduled.

This presentation will demonstrate the initial and repeat laparoscopy together with a review of the management of torsed ovaries in current practice.

AUTHOR AFFILIATION: C. Georgiou; Illawarra Health and Medical Research Institute / University of Wollongong / Wollongong Hospital, Wollongong, New South Wales, Australia.

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1620-1630

THE EFFECT OF HEATED HUMIDIFIED CARBON DIOXIDE ON POST-OPERATIVE PAIN AND RECOVERY TIMES IN PATIENTS UNDERGOING LAPAROSCOPIC SURGERY OF DURATION GREATER THAN 90 MINUTES. A RANDOMISED CONTROLLED TRIAL

Ellett L, Jagasia N, McIlwaine K, Cameron M, Readman E, Maher P

STUDY OBJECTIVE: To determine whether use of heated humidified carbon dioxide as insufflation gas during gynaecologic laparoscopy in operations longer than 90 minutes reduced postoperative pain, hypothermia and had an effect on return to normal activities.

DESIGN: A randomised controlled trial.

SETTING: A tertiary referral hospital.

PATIENTS: 22 women scheduled for gynaecologic laparoscopy greater than 90 minutes duration.

RESULTS: 9 patients were randomised to standard gas (control group) and 13 to heated humidified carbon dioxide (study group). Intraoperative and postoperative core temperature, recovery room analgesic use, pain scores and time to return to basic, normal and physical activities were all recorded.

No significant differences were found between the groups in terms of analgesic use in recovery or pain scores on Days 1 and 2. There was a trend to reduced pain on Day 3 post operatively. The treatment group maintained body temperature throughout the procedure better than the control group. This result was found to be statistically significant.

There were no significant differences between the groups in the time it took to return to normal or physical activities. There was a trend towards a quicker return to basic activities in the treatment group.

CONCLUSION: The use of heated humidified carbon dioxide in operations lasting longer than 90 minutes did not translate into any statistically significant benefits in terms of measurable patient outcomes.

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AUTHOR AFFILIATION: L. Ellett, N. Jagasia, K. McIlwaine, M. Cameron, E. Readman, P. Maher; Mercy Hospital for Women Endosurgery Unit, Heidelberg, Victoria, Australia.

1630-1640

REALITIES OF OPERATING

Georgiou C

Lower abdominal pain is a common presentation in gynaecology resulting in admissions through the Emergency Department or GP referral system. In the presence of previous gynaecological surgery, history, examination and investigations such as imaging, may prove to be challenging in reaching a diagnosis.

Frequently, the lower abdominal pain does not appear to have a gynaecological origin and the investigations may not be particularly informative. However, the previous gynaecological surgery (abdominal hysterectomy or caesarean sections), somehow makes them your patient even if the surgery occurred in the distant past. In addition, incidental findings in the adnexal region referred from other Specialties are also considered as your problem.

Faced with patient concern about incidental findings, ongoing lower abdominal pain, repeated admissions and conservative management, surgery slowly becomes an inevitable option. If appropriate, a laparoscopic approach to such conditions should be a straightforward process, although the anticipated anatomical modifications of the previous surgery are seldom welcomed and should be anticipated.



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Three such cases of women requiring surgery for suspected ovarian pathologies are presented:

Case 1: 48 year-old woman with bilateral lower abdominal pain following total abdominal hysterectomy with conservation of ovaries 17 years ago for cervical cancer.

Case 2: 35 year-old woman with central lower abdominal pain one year following abdominal hysterectomy for menorrhagia.

Case 3: 58 year-old recent renal transplant woman who presented with small bowel obstruction and was found to have an incidental vascular pelvic side-wall mass adjacent to the transplant kidney.

The operative findings and the outcomes of these surgeries together with the learning points from these experiences are discussed.

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1640-1650 LAPAROENDOSCOPIC SINGLE SITE SURGERY (LESS) IN GYNAECOLOGY IS FEASIBLE: A SINGLE SURGEON'S INITIAL EXPERIENCE WITH 100 CASES

Lekskul N, Siow A, Lao S, Abdullah A, Chern B

OBJECTIVE: To report our single surgeon's series of patients who underwent a variety of gynaecological procedures performed with laparoendoscopic single site surgery (LESS).

STUDY DESIGN: Descriptive, prospective, cohort study of patients who underwent LESS.

RESULTS: A total of 100 patients underwent LESS from November 2009 to July 2011. Procedures performed were total hysterectomy (46%), myomectomy (35%), salpingo-oophorectomy (10%), cystectomy (7%) and tubal surgery (2%). The mean operative time was 97.6 minutes (range 21-252 minutes). Considering only adnexal surgery, the mean operative time was 74.2 minutes (range 21-148 minutes). There was no case of conversion to laparotomy.

For the majority of the patients (93%), the postoperative course was uneventful. Postoperative morbidities included fever, ileus, acute urinary retention and postoperative transfusion, all of which were managed successfully. The mean postoperative hospital stay was 1.99 days. In the patients who had undergone hysterectomy, multiple linear regression revealed that the uterine weight significantly affected the operative time. If the uterine weights were less than 400 grams, the operative times were less than 150 minutes.

Concurrently, the fibroid size affected the operative time in the myomectomy operation. In the patients with fibroid of less than 10cm, the operative time tended to be around 150-200 minutes.

The use of barbed suture was not found to significantly lower the duration of surgery as compared to the traditional suture in both total hysterectomy and myomectomy. ($p=.489$ for Total hysterectomy and $p=.90$ for Myomectomy)

CONCLUSION: In gynaecological surgery, the results produced by LESS are comparable to the standard of care based on safety, feasibility and reproducibility based on proper case selection.

KEYWORDS: Laparoscopic Single Site Surgery, Single Incision Laparoscopic Surgery, Single Port Access Surgery, Single Port Laparoscopy.

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1650-1700 HAVE YOU SEEN MY THREADS?

Georgiou C

Levonorgestrel intrauterine system (LNG IUS; Mirena® Bayer Healthcare pharmaceuticals, Pymble, NSW Australia) is a common intrauterine system that is used for the management of contraception and/or heavy menstrual bleeding. The device is generally recommended to be changed/removed after five years. Although the device is considered one of the most effective contraceptive methods, complications in its use may occur. These may, or may not, be noticed at the time. They include perforation and expulsion.

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Four cases are presented in which the use of Mirena proved problematic;

Two cases in which perforation of the uterus required laparoscopic retrieval, one case in which the Mirena was left in-situ for ten years, and one case of an unexpected pregnancy with interesting fundal/placental USS findings in which the Mirena could not be located.

The management with respect to "missing" Mirenas is discussed together with the minimal access approaches for removal.

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1700-1710

OVERCOMING SIDE-DOCKING IN GYNAECOLOGIC ROBOTIC SURGERY WITH THE DA VINCI STANDARD SYSTEM: A KK HOSPITAL EXPERIENCE

Mohd J, Lekskul N, Chern B

BACKGROUND: The majority of previous experience with the gynaecologic robotic surgery, especially with the da Vinci Standard System, has utilised a method in which the robot is centrally located between the patient's legs in order to maximise instrument manoeuvrability and avoid robotic arm collision. However, a significant limitation of this docking method is the restricted vaginal and perineal access for the surgical team.

OBJECTIVE: The objective of this study was to describe the use of a robotic surgical system for gynaecologic surgery in a side-docking approach.

METHODS: We report a series of cases undergoing gynaecological procedures performed using the da Vinci Standard System in a side-docking approach. Multiple novel techniques were used to accomplish side-docking with the da Vinci Standard System without losing instrument manoeuvrability. The patient's record and operative findings were also reviewed.

RESULTS: A series of 17 consecutive gynaecologic robotic surgeries using the da Vinci Standard System in a side-docking approach were performed from September 2011 to April 2012. Vaginal access was readily available to surgeons without robotic arm collision. The working space for the assistant was improved to achieve adequate uterine manipulation. The median docking time was 6 minutes (range 2-33 minutes) and there was no major complication from the operations.

CONCLUSIONS: Side-docking is feasible in gynaecologic robotic surgery using the da Vinci Standard System. Its use may facilitate vaginal access which leads to better uterine manipulation and specimen retrieval.

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1710-1720

A SINGLE BLIND RANDOMISED CONTROLLED TRIAL OF SURGICAL AND PATIENT OUTCOMES USING MECHANICAL BOWEL PREPARATION BEFORE LAPAROSCOPIC GYNAECOLOGICAL SURGERY

Won HR, Maley P, Salim S, Rao A, Neil T, Campbell NT, Abbott JA

BACKGROUND: Mechanical bowel preparation is a common practice before laparoscopic gynaecologic surgery. The aim of this study is to compare the intra operative surgical view and bowel handling for three groups allocated to different pre-operative bowel preparation, for patients scheduled for laparoscopic surgery in the deep pelvis.

METHODS: A prospective, single blinded randomised controlled trial was performed at a tertiary teaching hospital. 308 participants having an elective laparoscopic gynaecological surgery for benign pathology were randomly assigned to one of the following three groups; fasting only, minimal residue diet for two days or minimal residue diet for two days plus mechanical bowel preparation with oral sodium picosulphate. The primary outcome measures were intraoperative surgical view and bowel handling. Surgeons assessing these aspects were blinded to the patient's allocation. The secondary outcome measures were changes in patient symptomatology, haematological and biochemical characteristics and bowel function.

FINDINGS: 263 out of 308 (85%) randomised participants completed the study according to protocol. Using a 100 point visual analogue scale (VAS) assessment, the intraoperative surgical view was better in the minimal residue plus mechanical bowel preparation group (median 92, IQR 80-95), over the fasting only group (median 85, IQR 72-93) or the minimal residue group (median 88, IQR 76-93) ($p < 0.01$).

When a verbal descriptor scale (VDS) was used to categorise the surgical view to one of excellent, good, medium, sufficient or poor, there was no difference ($\Delta 2 = 11.1$, $p = 0.2$) in the surgical view across the three groups, with more than 80% of participants across all three groups scoring 'good' or 'excellent'



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for surgical view. Bowel handling was easier with minimal residue diet with mechanical bowel preparation group (median 88, IQR 76-94, $p=0.04$) than the fasting only group (median 84, IQR 63-92) or minimal residue diet group (median 83, IQR 68-91) when VAS was used, but not with VDS ($\Delta 2=0.3$, $p=0.3$). Having minimal residue diet with mechanical bowel preparation caused significantly more headache ($t=5.3$, $p<0.01$), thirst ($t=3.2$, $p<0.01$), weakness ($t=5.9$, $p<0.01$), tiredness ($t=4.5$, $p<0.01$) and overall discomfort ($t=3.4$, $p<0.01$) when compared to the fasting only group.

There was no difference between the minimal residue diet group from the minimal residue diet plus mechanical bowel preparation group across all symptoms, with the exception of headache ($t=2.2$, $p=0.03$). The haemoglobin, haematocrit and electrolytes were not significantly altered when compared to the normal range following mechanical bowel preparation with the exception of urea (median 0.5 (IQR -0.8-1.4) vs 1.5 (IQR 0.7-2.4) vs 1.4 (IQR 0.5-2.3), $p=0.02$). There was no significant difference in the change of bowel function between the three groups.

INTERPRETATION: Minimal residue diet plus mechanical bowel preparation provides statistical improvement in surgical view and bowel handling but the benefit is likely of little clinical significance given overall blinded ratings from surgeons. Given the significant symptoms and discomfort caused for patients undertaking minimal residue diet with or without mechanical bowel preparation, fasting only without any pre-operative diet or bowel preparation is an adequate alternative for laparoscopic gynaecologic surgery involving the posterior pelvic compartment.

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AUTHOR AFFILIATION: H. R. Won, P. Maley, S. Salim, A. Rao, N. T. Campbell, J. A. Abbott; Royal Hospital for Women and University of New South Wales, Sydney, New South Wales, Australia.

1720-1730

TUBERCULOSIS SALPINGITIS DIAGNOSED DURING LAPAROSCOPY

Choi S, Cario G, Chou D, Reyftmann L, de Rosnay P, Baghlafl O, Rosen D

BACKGROUND: Female genital tract tuberculosis makes a diagnostic challenge, owing not only to its rarity but also to its nonspecific clinical features. In Australia, tuberculosis is of low incidence with an annual rate between 4-5 cases per 100,000 population, in contrast to 181 per 100,000 population in the Western Pacific and South East Asia regions. In 2009, among

the 1,062 bacteriologically confirmed cases of tuberculosis, 28 (2.63%) have genito-urinary diseases¹. When involving female genital tract, tuberculosis often only presents with low-grade symptomatology, and its clinical manifestation can overlap with signs of genital tract tumour and malignancy.

CASE: A 71 year-old Australian-born lady presented with nausea, decreased appetite, lethargy and occasional diarrhoea for two weeks. Examination was unremarkable. The level of C-reactive protein elevated to 77 mg/L. Her haemoglobin was 90 g/L with a normochromic, normocytic pattern. Ultrasound scan showed a hypoechoic solid lobulated mass in size of 40 x 38 x 23mm in the left adnexa, attaching to the normal-looking left ovary. The CT scan of abdomen showed pelvic lymphadenopathy. The CA-125 level was 26 units.

Laparoscopic examination showed multiple military fibrotic deposits over peritoneum. Widespread intraabdominal adhesion was present between the anterior abdominal wall and the viscera. The left fallopian tube was enlarged, fibrotic and encased in dense adhesion. Extensive dissection of adhesions, ureterolysis and left salpingectomy were performed laparoscopically. Histopathology confirmed necrotizing granulomatous salpingitis.

The culture of peritoneal washing grew mycobacterium tuberculosis sensitive to first line drugs. The subsequent investigations including chest X-Ray, CT scan of the chest and sputum culture did not show evidence of pulmonary infection. She was treated with quadruple anti-tuberculosis therapy.

CONCLUSION: Although female genital tuberculosis is rare, it continues to exist in Australia. The diagnosis of female genital tract tuberculosis can be elusive due to the nonspecific clinical and radiological features. Awareness and identification of the condition during laparoscopic exploration, together with appropriate microbiological and histopathological investigations, help with early diagnosis and prompt commencement of anti-tuberculosis treatment.

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FREE COMMUNICATIONS Poster Presentations

AUDIT TO ASSESS THE FAILURE RATE OF ESSURE STERILISATION AT SOUTH WEST GYNAECOLOGY, BUNBURY, WA

Weishaupt J

AIM: To explore the failure rates of the Essure sterilisation method at South West Gynaecology in the last eight years – since its introduction to Bunbury Regional Hospital.

BACKGROUND: Essure is a permanent form of contraception introduced in 2002 in the United States. It is a transcervical form of sterilisation where microinserts called coils are inserted through a hysteroscope into the fallopian tubes. A subsequent benign inflammatory process results in tubal occlusion within three months of insertion. An alternative form of contraception must be implemented during those three months whilst the occlusions are formed.

A subsequent follow up at three months using either a pelvic x-ray or hysterosalpingogram ensures the success of the procedure by visualising the position of the coils or occlusion of the fallopian tubes using a contrast dye. This method offers high efficacy without incisions, general anaesthesia, or a prolonged recovery period.

The Essure procedure is now reported to be 99.74% effective based on five years of follow-up, with zero pregnancies (from the phase II and pivotal clinical trials). The main reason for unsuccessful placement was anatomic, with almost half attributable to stenotic fallopian tubes. The use of nonsteroidal anti-inflammatory agents prior to the procedure was associated with increased success rates. Obesity and a history of abdominal surgery were not associated with lower placement rates.

METHOD: The Essure device has been offered at South West Gynaecology in Bunbury, WA since 2004. All patients undergoing permanent sterilisation in our day surgery at Bunbury Regional Hospital, who opted for hysteroscopic Essure sterilisation, were included from 2004 to 2011 and who had fallen into a completed or recorded three month follow up period at South West Gynaecology.

Multiple data points were collected on each patient including operator, weight, age, parity and 12-week follow up data. The follow up data included an X-ray or HSG attendance and alternative form of contraception prior to follow up. A successful procedure is confirmed with visualisation of the coils on x-ray or occlusion of the fallopian tubes on hysterosalpingogram or both if it was not indicative on x-ray.

RESULTS: 36 women had qualified as having undergone the procedure at South West gynaecology since 2004. All the procedures were undertaken by the consultants of the practice who had experience in the technique of the procedure. The average age of our patients was 36 with the youngest being 24 and the oldest 55 years old. The average parity was 2.5 (with one parity not having been recorded) and one being nulliparas. Only two patients' weights were recorded in the electronic notes from the practice.

Bilateral placement of the device at time of surgery was deemed successful in 23 (63.8%) of 36 patients. Of all the patients, 21 have 12-week hysterosalpingography or x-ray results and one had confirmation by an ultrasound scan. 9 patients were lost to follow-up, that is, no recorded attendance of 12 week HSG or x-ray or only an initial x-ray at time of procedure but no further follow up thereafter.

Of the 23 women undergoing the procedure, 21 (90.9%) showed bilateral tubal occlusion on their subsequent three month follow up HSG or x-ray. There were two failures of the Essure procedure. The first showed a three month follow-up HSG with a sub optimal right tubal occlusion and her exact method of contraception was not recorded. The second failure was reported as having only a unilateral placement of the device as the other side was reported as totally occluded. A three month HSG was not undertaken or recorded on this patient and a subsequent pregnancy was reported. It was unknown if she had continued her COCP in the interim.

There were five (13.8%) procedures that had failed or abandoned at time of surgery and converted to laparoscopic sterilisation at time of surgery.

A little over a half patients had a recorded method of contraception in the three month interim, however 11 patients did not have their choice of contraception recorded in their notes. The combined oral contraceptive pill was the most popular choice of birth control, (13 patients) followed by Depo Provera (2 patients), condoms (2 patients), Implanon (1 patient) and minipill (1 patient). As stated above, 5 patients had converted to laparoscopic sterilisation and no further contraception was needed.

CONCLUSION: At South West Gynaecology and in our experience, hysteroscopic placement of the Essure device is a feasible and effective approach for permanent sterilisation. The effectiveness data for this technology is based on proper placement and confirmation of tubal occlusion.



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These endpoints should be evaluated in 3 stages: (1) confirming proper device placement during the procedure, (2) confirming tubal occlusion at 90 days, and (3) understanding the risk of pregnancy for women who do not follow-up. XRAY and HSG follow up attendance is an area which can be improved upon at the practice and documentation of contraception choice can easily be corrected. A larger study group is more desirable in the future.

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LAPAROSCOPIC OVARIAN VEIN SAMPLING TO ENABLE FERTILITY PRESERVING SURGERY FOR A LEYDIG CELL TUMOUR - A CASE REPORT

Robinson A, Taylor J

INTRODUCTION: Androgen producing ovarian tumours are rare, accounting for <0.2% of all ovarian tumours, however 75% of these tumours are found in women <40 years, making fertility preservation a priority in management¹. These tumours are rarely bilateral (<1%) and can be safely treated with unilateral salpingo-oophorectomy in most cases¹, hence localisation of the tumour is paramount in planning appropriate surgical management. We describe a unique, minimally invasive diagnostic approach: laparoscopic bilateral ovarian vein sampling.

CASE SUMMARY: A 38 year-old female presented with severe hyperandrogenism and a markedly raised testosterone level. After biochemical exclusion of adrenal causes, and normal pelvic imaging, left ovarian origin was confirmed with laparoscopic bilateral ovarian vein sampling. A left salpingo-oophorectomy was performed, with a pathological diagnosis of well differentiated left Leydig cell tumour. The patient's symptoms improved rapidly and she remains well 12 months later.

DISCUSSION: Direct laparoscopic ovarian vein sampling can be used to localise a small androgen producing ovarian tumour. This may be safer and more readily available than percutaneous ovarian vein sampling². Successful bilateral laparoscopic ovarian vein sampling has not been reported in the literature until now, although unilateral sampling has³.

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GYNAECOLOGY TRAINEES' EXPERIENCE OF LAPAROSCOPIC SIMULATION (LAPSIM) AT MIDDLEMORE HOSPITAL: AN ANONYMOUS INTERNET BASED SURVEY

Burgess W, Barclay D

AIM: To assess the attitudes and opinions of the gynaecology trainees involved in the laparoscopic simulator program at Middlemore Hospital.

METHODS: Trainees who participated in the LapSim Training program and Middlemore hospital between October and December 2011 were asked to give their opinions, using an anonymous internet based survey, of the program and to assess their personal confidence in performing a range of laparoscopic procedures before and then after completing a 9 hour program on the laparoscopic simulators.

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RESULTS: 14 trainees took part in this pilot study. 86% response rate to the survey. All trainees felt the introduction session was helpful or essential. Only 25% required further assistance. The trainees were only about to make half of their allocated sessions. Confidence towards all laparoscopic procedures was increased. Confidence in holding the camera, increased from 8.08 to 8.75 out of 10. Confidence in diagnostic laparoscopy, increased from 6.42 to 7.33 out of 10. Confidence in tubal ligation, increased from 6.08 to 6.83 out of 10. Confidence in salpingectomy increased from 4.83 to 6.0 out of 10. Confidence in laparoscopy in general increased from 4.83 to 6.0 out of 10. Lack of haptic feedback was felt to be an issue, but having laparoscopic box trainers being available in the room was felt to be helpful.

CONCLUSION: Laparoscopic simulators improve trainee confidence without endangering patients during their learning.

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CASE REPORT: LAPAROSCOPIC AND HYSTEROSCOPIC MANAGEMENT OF A CAESAREAN SCAR ECTOPIC PREGNANCY IN KK HOSPITAL, SINGAPORE

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We report a case of Caesarean scar ectopic pregnancy which was managed with combination of laparoscopy and hysteroscopy. A 30 year-old woman diagnosed with Caesarean scar ectopic pregnancy in her second pregnancy. Methotrexate treatment failed to cure this patient, and surgical evacuation was initiated. Laparoscopy was used to visualise the intra-abdominal organs and scar ectopic. Hysteroscopy visualise the uterine cavity and enabled cold resection without electrosurgery under direct vision. No significant bleeding during procedure. Patient tolerated procedure well, post operative recovery was uneventful. Hysteroscopy – cold removal procedure together with laparoscopy proved to be a reliable method for diagnosing and managing ectopic pregnancy in a previous Caesarean section scar and it enabled uterine preservation.

INTRODUCTION: Caesarean scar ectopic pregnancy is the rarest form of ectopic pregnancy, and carries a high risk of uterine rupture and uncontrollable haemorrhage^{1,2}. Various conservative and surgical management have been proposed for the treatment of Caesarean scar ectopic pregnancy; however, the optimal management is yet to be established due to its rare occurrence. Methotrexate is the most common medical therapy for early ectopic pregnancy. Laparoscopy has its value to avoid unnecessary exploratory laparotomy and to preserve the patient's reproductive capability. Hysteroscopy and cold removal of pregnancy considered of having less risk compared to open laparotomy or laparoscopic removal of Caesarean scar ectopic pregnancy because the exact location of ectopic pregnancy can be determined and careful evacuation can be done under direct visualisation.

CASE REPORT: A 30 year-old woman was on her second pregnancy with previous C-section. A scar ectopic pregnancy was noted on the fifth week of pregnancy. Methotrexate given, but failed to remove the pregnancy. Repeated ultrasound scan found increased fetal size and fetal cardiac activity. Surgical evacuation of Caesarean scar ectopic pregnancy initiated.



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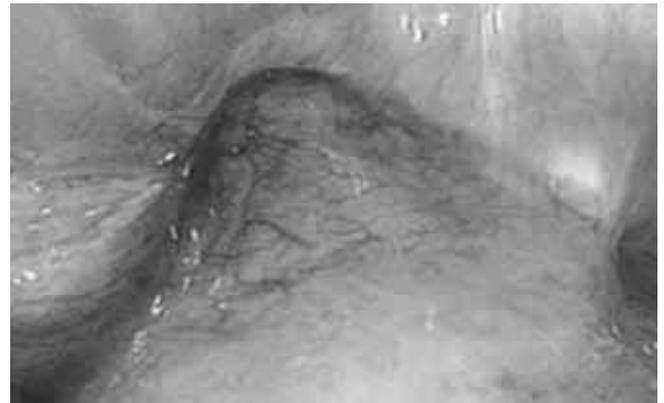


Figure 1. Ultrasound showed a Caesarean scar ectopic pregnancy on 5 weeks (top) and 7 weeks (bottom).

Laparoscopic in combination with hysteroscopic approach was arranged. Under general anesthesia, the patient was placed in the 15 degree Trendelenburg position. A Foley catheter was inserted pre-operatively in order to enable continuous monitoring of urine output during the operation. Open entry done and pneumoperitoneum was created by insufflating carbon dioxide (CO₂) at a maximal pressure of 15 mmHg. A laparoscope with an attached camera was inserted through the cannula to visualise the intra-abdominal organs and scar ectopic seen near to the bladder (Figure 2).



Figure 2. Laparoscopic view. Caesarean scar ectopic pregnancy bulging through the lower segment of uterus.



A 30 degree operative hysteroscope with 8mm external diameter continuous flow sheath was used to visualise the uterine cavity. The pregnancy was located in the myometrial defect and removed under direct vision with cold resection without electrosurgery by a 4mm loop in the working element of the operative hysteroscope (Figure 3). No significant bleeding during procedure.

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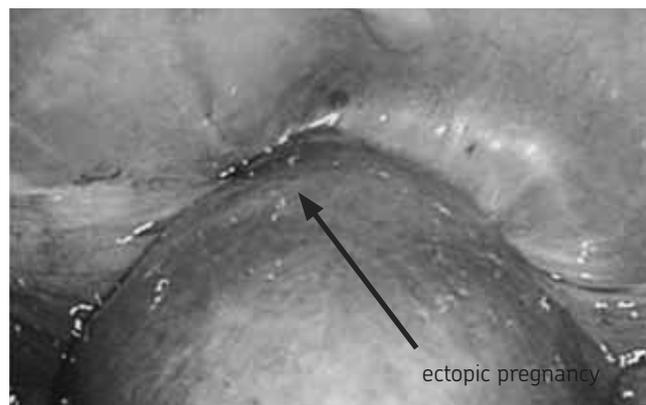
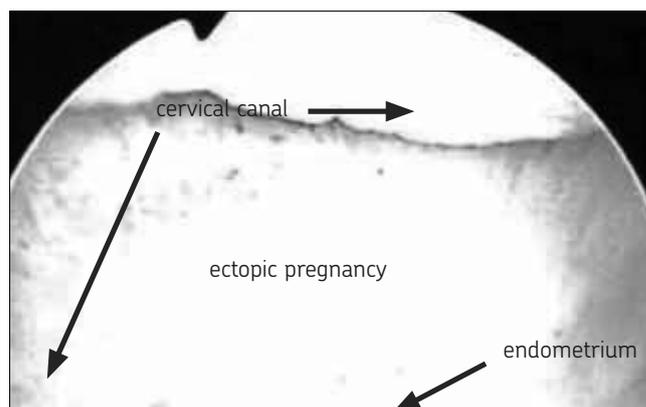


Figure 3. Hysteroscopic view. Ectopic pregnancy seen from cervical canal (top) and ectopic pregnancy seen inside uterus cavity (bottom).

Post evacuation, hysteroscope showed empty cavity, and from laparoscope, no scar ectopic seen (Figure 4). Patient tolerated procedure well, post operative recovery was uneventful. Patient discharge two days later and further evaluation showed rapid decline of β -hCG to the level of 6,5 IU/mL after 15 day.

Figure 4. Post evacuation of ectopic pregnancy. Ectopic pregnancy was not seen by hysteroscopy (top). Uterus shown intact and no ectopic pregnancy bulging seen from laparoscopic view (bottom).

DISCUSSION: There several points in surgical management of Cesarean scar ectopic pregnancy. Dilatation and curettage is avoided because it may induce perforation and intractable bleeding¹⁰. Laparoscopy is the method of choice for the stable, non-ruptured condition. A recently described minimally invasive approach includes hysteroscopy for visualisation of the uterine cavity combined with incision and aspiration of the ectopic mass by operative laparoscopy^{2,11} or by cold resection without electrosurgery¹².



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In our hospital, we tried to find another suitable management for a stable, unruptured Caesarean scar ectopic pregnancy, considering that increased vascularisation during pregnancy and placental formation in Caesarean scar could risk intractable bleeding during laparoscopic evacuation of the pregnancy. Furthermore, repair of the uterine laparotomy scar may not prevent the occurrence of uterine rupture in the subsequent pregnancy¹³.

Hysteroscopy and cold resection without electrosurgery considered of having less risk compared to open laparotomy and laparoscopic removal of Caesarean scar ectopic pregnancy because the exact location of ectopic pregnancy can be determined and careful evacuation can be done under direct visualisation. Still, laparoscopic surveillance during the cold removal of the ectopic pregnancy will add safety of the patient with minimal pain post operatively.

In this case, hysteroscopic – cold removal procedure together with laparoscopy seem to be a reliable method for diagnosing and managing ectopic pregnancy in a previous Caesarean section scar and it enabled uterine preservation.

TAKE HOME MESSAGE: There several points in surgical management of Caesarean scar ectopic pregnancy. Dilatation and curettage avoided in a previous Caesarean section scar. Laparoscopy is suitable for stable – ruptured ectopic tubal pregnancy or Caesarean scar ectopic pregnancy.

Hysteroscopic – cold removal procedure together with laparoscopy seem to be a reliable method for a stable, unruptured Caesarean scar ectopic pregnancy who failed Methotrexate treatment.

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TRAINING AND EDUCATION IN GYNAECOLOGY LAPAROSCOPIC SURGERY: SINGAPORE EXPERIENCE

Lakhotia S, Chern B

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