



Australasian Gynaecological
Endoscopy & Surgery
Society Limited

AGES XXIII Annual Scientific Meeting 2013

The Pelvis in Pain
Endometriosis and Beyond

International Guest Speakers:

Prof. Mauricio Abrão *Brazil*

Prof. Dr. Thomas D'Hooghe *Belgium*

Asst. Prof. Krisztina Bajzak *Canada*

Abstracts & Program

Softel Brisbane Central

7 to 9 MARCH 2013

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Vuillard Edouard (1868-1940)
Figure de douleur

Paris, musée d'Orsay

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The Pelvis in Pain Endometriosis and Beyond

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‘The Pelvis in Pain: Endometriosis and Beyond’

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The Pelvis in Pain Endometriosis and Beyond

WELCOME

South-East Queensland is known for its golden beaches, glorious sunshine and rolling hinterlands. South-East Queensland's pearl has to be Brisbane - a world-class city straddling the Brisbane River, who has grown into a wondrous woman of beauty, culture and style.

The Board of AGES welcomes you to Brisbane for the Annual Scientific Meeting, March 7-9 2013, where our international and local faculty will dissect pelvic pain in its myriad of manifestations.

Guest speakers include surgical expert Mauricio Abrão from Sao Paulo Brazil, AAGL Research director and pelvic pain luminary Krisztina Bajzak from Memorial University, Newfoundland Canada, and fertility and scientific doyen Thomas D'Hooghe from Leuven Belgium.

Joining them is a stellar cast of Australians and New Zealanders who will cover pregnancy, myomas, hysterectomy, adhesions and every facet of our specialty connected with pain.

Live surgery from St Andrews War Memorial and Greenslopes Hospitals will showcase laparoscopic myomectomy, laparoscopic hysterectomy and laparoscopic resection of endometriosis.

An international panel will be led through a series of disasters and damage, hypothetical style for their input on management and the debate entitled "Surgeons should retire at 50" is one not to be missed.

Throw in a new look Free Communications program including the introduction of the Digital Communications Session, cutting edge technology in the AGES trade exhibition, pre-conference workshops on hysteroscopy and laparoscopic suturing ... and you have another outstanding AGES event.

We welcome you to this beautiful city where both Australia and AGES continue to shine.

Assoc. Prof. Anusch Yazdani
AGES Vice President
Conference Chair

Dr Jim Tsaltas
AGES President
Scientific Co-Chair

Assoc. Prof. Jason Abbott
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South Bank Brisbane

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Asst. Prof. Krisztina Bajzak	<i>Canada</i>
Prof. Dr Thomas D'Hooghe	<i>Belgium</i>

CPD AND PR&CRM POINTS

Full attendance Thursday 6 March, Friday 7 March and Saturday 8 March	21 CPD points
Thursday 6 March only	8 CPD points
Friday 7 March only	9 CPD points
Saturday 8 March only	5 CPD points

Pre-Conference Workshops 6 March	
Karl Storz Endoscopy - <i>Hysteroscopic and Resection</i>	3 CPD points
Olympus - <i>Reload Your Suturing Skills</i>	3 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.

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.

FACULTY

Assoc. Prof. Jason Abbott	<i>New South Wales</i>
Dr Reza Adib	<i>Queensland</i>
Dr Fariba Behnia-Willison	<i>South Australia</i>
Dr Jason Chow	<i>New South Wales</i>
Assoc. Prof. Michael Cooper	<i>New South Wales</i>
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Ms Taryn Hallam	<i>New South Wales</i>
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Dr Tal Jacobson	<i>Queensland</i>
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Dr Neil Johnson	<i>New Zealand</i>
Dr Juliette Koch	<i>New South Wales</i>
Assoc. Prof. Alan Lam	<i>New South Wales</i>
Dr Kenneth Law	<i>Queensland</i>
Prof. Peter Maher	<i>Victoria</i>
Dr Michael McEvoy	<i>South Australia</i>
Dr David Molloy	<i>Queensland</i>
Dr Grant Montgomery	<i>Queensland</i>
Dr Erin Nesbitt-Hawes	<i>New South Wales</i>
Prof. Andreas Obermair	<i>Queensland</i>
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Dr Jim Tsaltas	<i>Victoria</i>
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Assoc. Prof. Anusch Yazdani	<i>Queensland</i>
Dr Michael Wynn-Williams	<i>Queensland</i>

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Membership application forms are available from the AGES website: www.ages.com.au

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The Pelvis in Pain Endometriosis and Beyond

Program

Sofitel Brisbane Central

0730-0800 Conference Registration

Ballroom Le Grande

0800-0820 Conference Opening and Welcome

J Tsaltas, A Yazdani

Day 1
Thursday
7 March
2013

0820-1030 SESSION 1

When the Lining is Not Always Silver: Problems of the Peritoneum

Chairs: J Tsaltas, A Yazdani

Sponsored by Stryker

0820-0840 Genetics and epidemiology of endometriosis

J Painter

0840-0900 Images of pain – the library of lesions

M Cooper

0900-0920 Macro to micro – the host of heinous histology

K Law

0920-0940 The first cut is the deepest

P Maher

0940-1000 Questions

1000-1030 Keynote Lecture

Chair: J Abbott

Imaging and endometriosis – a match made in surgical heaven

M Abrão

1030-1100 Morning Tea and Trade Exhibition

1100-1230 SESSION 2

Piecing Together the Pain Puzzle

Chairs: H Merkur, K Jansen

Sponsored by Karl Storz Endoscopy

1100-1120 Mechanisms of pain

K Bajzak

1120-1135 The evidence for endometriosis causing and not causing pain

M Druitt

1135-1150 Don't dys.... me

J Abbott

1150-1200 Questions

1200-1230 Keynote Lecture

Chair: L Rombauts

Non-invasive diagnosis of endometriosis

T D'Hooghe

1230-1330 Lunch and Trade Exhibition

1330-1500 SESSION 3

Free Communications Session I

Sponsored by Olympus

Ballroom Le Grande 1

Chairs: P Maher, M Abrão

1330-1340 The effect of Trendelenburg Tilt on cognitive function

Lee S, Tan A, Griffiths J, Ang C

1340-1350 Laparoscopic management of an adnexal mass during the second trimester of pregnancy
Georgiou C

1350-1400 3D ultrasound of the pelvic floor - a reproducibility study

*Nesbitt-Hawes EM,
Dietz HP, Abbott JA*

1400-1410 Should bilateral salpingectomy be a routine part of hysterectomy?

*Manley T,
Tsaltas J, Najjar H*

1410-1420 Travelling fellowship report

Smith C

1420-1430 Predictors of prolapse recurrence following laparoscopic sacrocolpopexy

*Wong V,
Guzman-Rojas R, Shek KL, Chou D, Moore K, Dietz H*

- 1430-1440 Not a fibroid - application of Myosure to non-myoma pathology *Nesbitt-Hawes EM, Abbott JA*
- 1440-1450 XCEL Bladeless Trocar versus Veress Needle: A randomised controlled trial comparing these two entry techniques in gynaecological laparoscopic surgery *Manley T, Wright P, Vollenhoven B, Tsaltas J, Lawrence A, Najjar H, Pearce S, Tan J, Chan K-W, Wang L, Amir M, Fernandes H, Hyde S, Grant P, McIlwaine K, Cameron M*
- 1450-1500 Rectovaginal endometriosis in obese women. Is surgery more complicated? *Edmonds S, Barclay D, Van der Merwe A, Israel L, Peng S-L*

Free Communication Session II*Sponsored by Johnson & Johnson Medical*

Ballroom Le Grande 2

Chairs: A Rosamilia, M Wynn-Williams

- 1330-1340 Pregnancy following laparoscopic radical trachelectomy *Yao S-E, Lee S, Tan J*
- 1340-1350 Clinical analysis of 17 cases undergoing laparoscopic pelvic lymphadenectomy for gynecology malignant tumor *Xu H, Zhang B*
- 1350-1400 Laparoscopic excision of full-thickness bladder endometriotic nodule, partial cystectomy and bilateral ureteric implantation in a young lady with long-standing obstructive nephropathy caused by severe pelvic endometriosis *Choi S, Aslan P, Cario G, Rosen D, Reyftmann L, de Rosnay P, Chou D*
- 1400-1410 Travelling fellowship report *Campbell N*
- 1410-1420 Laparoscopic removal and repair of Caesarean scar ectopic pregnancy *Titiz, H*
- 1420-1430 The association between pouch of Douglas obliteration and surgical findings 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*
- 1430-1440 Evaluation of Code Critical Cesarean sections at Westmead Hospital *Kapurubandara S, Tse T, Anpalagan A, McGee T*
- 1440-1450 Can we develop a model to predict Pouch of Douglas obliteration in women with suspected endometriosis? *Reid S, Lu C, Casikar I, Condous G*
- 1450-1500 A retrospective analysis looking at Case-mix and complications in an established tertiary-level Centre *de Rosnay P, Cario G, Rosen D, Chou D, Cooper M, Reid G, Reyftmann L, Choi S*
- 1500-1530 Afternoon Tea and Trade Exhibition

1530-1715 SESSION 4**Managing Messes***Sponsored by Karl Storz Endoscopy*

Chairs: M McEvoy, T Jacobson

- 1530-1550 Single surgeon surgery: perils and pitfalls *A Lam*
- 1550-1610 Co-operation creates cohesion for complexity *J Tsaltas*
- 1610-1630 Bringing it all together – guidelines for management *N Johnson*
- 1630-1715 **Damage and Disasters**
Panel discussion
Moderators: A Yazdani, J Abbott
Panel: J Tsaltas, A Lam, N Johnson, K Bajzak, T D'Hooghe, M Abrão
- 1715-1815 **WELCOME COCKTAIL RECEPTION** *Sofitel Brisbane Central*

Day 1
Thursday
7 March
2013





The Pelvis in Pain Endometriosis and Beyond

Program

Sofitel Brisbane Central

Day 2
Friday
8 March
2013

Ballroom Le Grande

0830-1030 SESSION 5

Live Surgery

Sponsored by Stryker

Moderators: S Salfinger, M Abrão, M Wynn-Williams

0830-1030 Live surgery transmission

Site 1: St Andrews Hospital

Evidence	Surgeon	Surgery
C Smith	D Molloy	Total laparoscopic hysterectomy, laparoscopic Myomectomy
J Chow	A Yazdani	Laparoscopic resection of endometriosis

Site 2: Greenslopes Hospital

Evidence	Surgeon	Surgery
E Nesbitt-Hawes	A Obermair	Laparoscopic hysterectomy

1030-1100 Morning Tea and Trade Exhibition

Digital Presentation Session

1030 Submucous fibroids - a series of hysteroscopic morcellation

Nesbitt-Hawes EM, Sgroi J, Abbott JA

1035 Thinking outside the box - women's experience of living with endometriosis: a qualitative study

Moradi M, Parker M, Lopez V, Sneddon A, Phillips C, Ellwood D

1040 Bladder and bowel dysfunction after excision of deep infiltrating endometriosis

Chow JSW, Cooper MJW, Korda A, Benness C, Krishnan S

1045 Case report: Cervico-peritoneal fistula following hysteroscopic resection of caesarean scar ectopic pregnancy

Maley P, Law K, Bourke M, Abbott J

1100-1230 SESSION 6

Pain and Pregnancy: An Unholy Alliance

Chairs: K Harrison, A Rosamilia

Sponsored by Johnson & Johnson Medical

1100-1115 Endometriomas, AMH and fertility – the devil's triangle

J Koch

1115-1130 Pain's a drain in pregnancy

K Jansen

1130-1200 Keynote Lecture

Chair: J Tsaltas

Pain starts with a P not an E

K Bajzak

1200-1300 Lunch and Trade Exhibition

Digital Presentation Session

1200 Luteal phase defect and ectopic pregnancy

Miller B, McLinon L, Beckman M

1205 Subsequent management of unsuccessful Falshli Clip tubal occlusion.

Georgiou C

1210 Thrombus-like structures seen in the infundibular-pelvic ligament during the laparoscopic management of ovarian torsion

Georgiou C

1215 Laparoscopic myomectomy of large intramural fibroid in a Jehovah's Witness

Choi S, Caska P, Cario G, Reftmann L, de Rosnay P, Chou D

1220 Can we predict posterior compartment Deeply Infiltrating Endometriosis (DIE) using Office

Sonovaginography (SVG) in women undergoing laparoscopy for chronic pelvic pain? *Reid S, Casikar I, Reid G, Abbott J, Cario G, Chou D, Kowalski D, Cooper M, Condous G*

1230 Small bowel injury during laparoscopy to drain Infected pelvic collections *Chohan K, Anpalagan A*

1235 Laparoscopic excision of bladder endometriotic nodule

Lanziz H, Swift G

1240 Robotic surgery and the Da Vinci Surgical System – pathway to accreditation as experienced by a

tertiary level benign endo-gynaecological unit *de Rosnay P, Cario G, Rosen D, Chou D, Cooper M, Reid G, Reftmann L, Choi S*

Day 2

Friday

8 March

2013

- 1300-1500 **SESSION 7**
Free Communications - Chairmen's Choice
 Ballroom Le Grande I
 Chairs: J Tsaltas, A Yazdani, J Abbott
Sponsored by Stryker
- 1300-1310 The use of a multimedia module to aid the informed consent process for gynaecological laparoscopy for pelvic pain. A Randomized Control Trial. *Ellett L, Villegas R, Jagasia N, Beischer A, Readman E, Maher P*
- 1310-1320 Laparoscopic repair of caesarean scar defect and pregnancy outcome *Kong KY, Angstetra D, Reid G*
- 1320-1330 Establishment of a robotic surgical programme for benign gynaecology in an advanced laparoscopic centre – Proctorship and Beyond *Choi S, Rosen D, Chou D, Reyftmann L, de Rosnay P, Cario G*
- 1330-1340 Laparoscopic myomectomy of an 1.8kg pedunculated fibroid causing uterine torsion *Cebola M, Cario G, Rosen D, Reyftmann L, De Rosnay P, Choi S, Chou D*
- 1340-1350 To excise or ablate? Prospective randomized double blinded trial comparing surgical treatment of endometriosis over 5 Years *Healey M, Kaur H, Cheng C*
- 1350-1400 The role of laparoscopy in the surgical management of a 4.2kg uterine fibroid – a video presentation *de Rosnay P, Cario G, Rosen D, Cooper M, Reid G, Reyftmann L, Choi S, Chou D.*
- 1400-1410 The value of MRI in the investigation of pudendal nerve entrapment *Chow ISW, Sachinwalla T, Jarvis SK, Vancaillie TG*
- 1410-1420 Combined Levonorgestrel intrauterine system and Etonogestrel subdermal implant for refractory endometriosis-associated pelvic pain: An effective new dual therapy *Marren AJ, Fraser IS, Al-Jefout MI, Pardey A, Pardey J, Ng CHM*
- 1420-1430 The effect of patient body mass index on surgical difficulty in gynaecological laparoscopy. A prospective observational study *McIlwaine K, Ellett L, Villegas R, Cameron M, Jagasia N, Readman E, Maher P*
- 1430-1440 Laparoscopy and gynaecological diaphragmatic disease *Yao S-E, Lee S, Tan J*
- 1440-1450 Depot Medroxyprogesterone Acetate (DMPA) in the treatment of Endometriosis *Vollenhoven B, Dennerstein G, Fernando S, Fraser I, Polyakov A, Vu P, Wark JD*
- 1450-1500 Retrospective clinical audit reviewing the use of Magnetic Resonance guided Focused Ultrasound (MRgFUS) in the treatment of submucosal uterine fibroids at the Royal Women's Hospital Melbourne *Rajadevan N, Szabo R, Dobrotwir A, Ang WC*
- 1500-1530 Afternoon Tea and Trade Exhibition
 Digital Presentation Session
- 1500 Laparoscopic repair of intrapartum uterine rupture and uterovaginal detachment *Lee S, Tan J*
- 1505 Barbed sutures: Are they safe for vault closure at laparoscopic hysterectomy? Is there any evidence? *Manley T, Tsaltas J, Najjar H*
- 1510 The prediction of Pouch of Douglas obliteration using off-line analysis of the TVS 'Sliding Sign': Inter- and Intra- Observer Agreement *Reid S, Lu C, Casikar I, Mein B, Magotti R, Ludlow J, Benzie R, Condous G*
- 1515 Diagnostic accuracy for the prediction of Pouch of Douglas obliteration using off-line analysis of the TVS 'Sliding Sign'. *Reid S, Lu C, Casikar I, Mein B, Magotti R, Ludlow J, Benzie R, Condous G*



The Pelvis in Pain Endometriosis and Beyond

Program

Sofitel Brisbane Central

Day 2
Friday
8 March
2013

1530-1720 **SESSION 8**

Future Frontiers

Chairs: H Merkur, R O'Shea

Sponsored by Olympus

1530-1600 **The Perpetual Dan O'Connor Lecture**

Chair: P Maher

From benchside to bedside – translating endometriosis research

G Montgomery

1600-1615 SILS – Single Incision Laparoscopic Surgery

F Behnia-Willison

1615-1630 NOTES – Natural Orifice Transluminal Endoscopic Surgery

R Adib

1630-1645 Medical directions

L Rombauts

1645-1705 Robotics and endometriosis

M Abrão

1705-1720 Questions

1730-1830 **AGES ANNUAL GENERAL MEETING**

1930 for 2030 **GALA CONFERENCE DINNER**

Roof Terrace, Gallery of Modern Art (GOMA),
Stanley Place, Brisbane

Private Tour of the 7th Asia Pacific Triennial of Contemporary Art

Complimentary coach transfers provided. Please assemble in the hotel foyer at 1900.



Ballroom Le Grande

0815-1030 SESSION 9
Thinking Outside the Box: Non-gynaecological Causes of Pelvic Pain
 Chairs: A Lam, N Johnson
 Sponsored by Karl Storz Endoscopy

- | | | |
|-----------|---|---------------------|
| 0815-0845 | Why is classification of endometriosis such a struggle? | <i>M Abrão</i> |
| 0845-0905 | Interstitial cystitis | <i>A Rosamilia</i> |
| 0905-0925 | Musculoskeletal issues | <i>T Hallam</i> |
| 0925-0945 | Functional bowel disorders | <i>G Hume</i> |
| 0945-1015 | Imaging and managing in the canal of pain | <i>T Vancaillie</i> |
| 1015-1030 | Questions | |
| 1030-1100 | Morning Tea and Trade Exhibition | |

1100-1300 SESSION 10
How Far Does Pain Reach?
 Chairs: J Tsaltas, A Yazdani
 Sponsored by Stryker

- | | | |
|-----------|---|-----------------------------|
| 1100-1130 | Hysterectomy and chronic pelvic pain - a forgone conclusion? | <i>K Bajzak</i> |
| 1130-1200 | The price of pain | <i>T D'Hooghe</i> |
| 1200-1215 | Questions | |
| 1215-1245 | Presidential Debate:
Surgeons should retire at 50
For: J Abbott, T Jacobson
Against: P Maher, M McEvoy | |
| 1245-1300 | Awards and close | <i>J Tsaltas, A Yazdani</i> |

Day 3
Saturday
9 March
2013

AWARDS

- | | | |
|--|---------------|---|
| Best Free Communication | \$1000 | Sponsored by Covidien & AGES |
| All presenters of free communications, regardless of Fellow or trainee status, with the emphasis on scientific merit | | |
| Outstanding New Presenter | \$750 | Sponsored by Johnson & Johnson Medical |
| Open to all first time presenters at an AGES meeting. This award is to encourage new trainees and Fellows who have never previously presented. | | |
| Outstanding Video Presentation | \$750 | Sponsored by AGES |
| All video presentations | | |
| Outstanding Trainee Presentation – the Platinum Laparoscopic Award | \$750 | Sponsored by Stryker and AGES |
| All trainees and Fellows in the AGES training program, or Fellows in their first year post-training to reflect work completed during training | | |
| Best Digital Communications Presentation | \$750 | Sponsored by AGES |
| All digital free communication presentations | | |





The Pelvis in Pain Endometriosis and Beyond

Program Abstracts - Thursday 7 March

SESSION 1 / 0840-0900

Images of pain - the library of lesions

Cooper M

This presentation will attempt to display the myriad range of appearances that endometriosis can appear in.

AUTHOR AFFILIATION: Clinical Associate Professor Michael Cooper; Department of Obstetrics and Gynaecology at Sydney University, Royal Prince Alfred Hospital, St Luke's Hospital, St Vincent's Private Hospital, Sydney IVF Sydney New South Wales, Australia.

SESSION 1 / 0900-0920

Macro to micro – The host of heinous histology

Law K

Endometriosis is defined histologically as the presence of endometrial glands and stroma at extrauterine sites. It has a myriad of gross appearances, and can vary from 'powder burn' lesions, white or yellow lesions/nodules, clear vesicles to flame-like red lesions. To the trained eye, endometriosis can usually be macroscopically recognised, but some studies have reported the correlation between laparoscopic diagnosis and histological diagnosis can be as low as 65%, and may be affected by operator experience and sampling problems.

Despite ongoing research, it is unclear as to the exact mechanisms by which pain is generated by endometriotic lesions. It has been reported that deep endometriotic lesions may be neurotrophic, with higher expression of nerve growth factor in comparison with peritoneal and ovarian implants. In particular, histological studies have shown a proliferation of nerve fibres associated with rectovaginal nodules. However a correlation between the type of lesion and the severity of pain has not been consistently demonstrated. Ultimately the location of disease may be a more important predictor of the nature and degree of symptoms.

AUTHOR AFFILIATION; Dr Kenneth Law; Greenslopes Private Hospital, Brisbane, Queensland, Australia.

SESSION 1 / 0920-0940

The first cut is the deepest

Maher P

An interesting title but what does it mean. As we know endometriosis strikes all ages even the pre-menarchal patient. There is naturally a reluctance to operate on the very young patient.

Another issue which needs to be addressed at the highest level, i.e. College is who should do this surgery. Too many inexperienced gynaecologists are setting themselves up in practice and trumpeting to the unsuspecting public their "expertise" in this and many other branches of gynaecology.

The approach to each group of patients will be discussed taking into account age, symptoms and lifestyle impact.

The effect of chronic pelvic pain on treatment will be discussed according to three age groups of patient that the author has arbitrarily selected.

Empiric, drug and surgical treatment will be discussed also according to these groups and the impact of the "first cut" will be discussed.

At the completion of the presentation the author will revisit who should do what and to whom.

The first cut is not necessarily the deepest!!

AUTHOR AFFILIATION: Professor Peter Maher; Head, Department of Endosurger, Mercy Hospital for Women, Melbourne, Victoria, Australia.

SESSION 1 – KEYNOTE LECTURE / 1000-1030

Imaging and endometriosis: A match made in surgical heaven

Abrão M

Endometriosis poses a challenging clinical and surgical dilemma for many gynecologists. Realizing the depth and extent of disease prior to surgery can be the key to pre-operative surgical planning and patient counselling. This presentation provides a discussion of the role of pre-operative imaging (with a defined protocol in ultrasound) and a description of the technique. Imaging findings will be correlated to those in surgery.

AUTHOR AFFILIATION: Professor Mauricio Abrão; Director of Endometriosis Division, Ob/Gyn, Department, Sao Paulo University, Brazil. President, SBE - the Brazilian Endometriosis and Minimally Invasive Gynecology Association. Director, Reproductive Clinic, Sirio Libanes Hospital, Sao Paulo, Brazil.

SESSION 2 / 1100-1120

Mechanisms of pain

Bajzak K

Chronic pelvic pain (CPP) is responsible for one in ten gynaecologic outpatient visits and the indication for 15-50% of gynaecologic laparoscopies and 12% of hysterectomies. Limited data is available on the prevalence of CPP it is

Program Abstracts - Thursday 7 March

estimated that direct and indirect costs in the US exceed 2 billion per year.

Peripheral activation: Pain sensation begins when a noxious stimulus activates a peripheral nociceptor ("nerve ending"). These stimuli activate specific receptors on a neuron which depolarizes due to an influx of positive ions (Na and Ca²⁺ usually). Once a threshold is reached the neuron carries the message up to the spinal cord.

CNS activation: In the spinal cord the neuron releases transmitters (glutamate, sub-P) which stimulate the next neuron which can be either excitatory or inhibitory. These in turn relay the message to brain via the thalamus which acts as a relay station to other areas of the brain (amygdala, insula & cortex). Functionally, pain processing in the CNS occurs in 3 domains:

1. Sensory: location and severity of pain
2. Affective: emotional valence of pain
3. Cognitive: what we think and do about pain.

Descending feedback from the brain in response to pain signal is subject to modulation and can inhibit or enhance the pain signal. So, the way individuals think about their pain (stress, anxiety, CBT) can affect both sensory and affective processing of pain.

Chronic pain is very different from acute pain. The unique neurobiology of chronic pain leads to several consequences including neuroplasticity, central sensitization, convergence, antidromic transmission, neurogenic inflammation and peripheral sensitization. Once these changes occur pain becomes neuropathic in nature and independent of the inciting event. Pain itself becomes a disease.

REFERENCES:

1. Pharmacological Mgt of Chronic Neuropathic pain- Consensus Statement and Guidelines from the Canadian Pain Society. *J Pain Res Manage.* 2007;12:13-21
2. Neurobiology of Chronic Pain: Lessons Learned from FM and Related Conditions. Clauw DJ. University of Michigan. Lecture at 17th Annual Scientific Meeting on Chronic Pelvic Pain, 2009
3. Neural Mechanisms of Pelvic Organ Cross-Sensitization. Malykhina AP. *Neuroscience.* 2007;149:660-672
4. Course overview of Chronic Pelvic Pain and Pain Theory. Howard FM. Lecture at AAGL 36th Annual Global Congress, PG Course 3 Chronic Pelvic Pain: Diagnosis and Treatment, 2007
5. The anatomy and neurophysiology of pelvic pain. Lamvu G, Steege JF. *JMIG.* 2006;13:516-522
6. How, Who and When of Opioid Treatment. Dogra S. University of N Carolina Chapel Hill. Lecture at 14th Annual Scientific Meeting on Chronic Pelvic Pain, 2006
7. Consensus Guidelines for the Management of CPP. SOGC Clinical Practice Guideline No. 164, August 2005
8. Pelvic Pain, Diagnosis and Management. Howard FM, Perry PC, Carter JE, El-Minawi AM. Lippincott Williams and Wilkins. Philadelphia. 2000

9. Neuropathic pain. Bennett M. Oxford University Press. 2007

10. Managing Pain. The Canadian Healthcare Professional's Reference. Jovey RD. Healthcare and Financial Publishing, Rogers Media. 2002

11. Current Therapy in Pain. Smith Hs. Saunders Elsevier. 2009

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SESSION 2 / 1120-1135

The evidence for endometriosis causing and not causing pain

Druitt M

Endometriosis is a heterogenous disorder with a spectrum of associated pains: dysmenorrhoea, dyspareunia, non menstrual chronic pelvic pain, dyschezia, dysuria, musculoskeletal pain (Stratton and Berkley 2011). The experience of pain is affected by many variables. Pain can be acute or chronic, somatic or visceral and can be classified according to mechanism: nociceptive, inflammatory, neuropathic, psychogenic, mixed or idiopathic (Howard 2009).

This topic will be considered from the point of view of a neurological diagram.

Pain in endometriosis could be generated from substances produced in or found near the endometriotic lesion (eg TNF and nerve growth factors), these could stimulate nociceptors or cause inflammation mediated pain. A neuropathic mechanism (from damage or dysfunction of neurons in the peripheral or central nervous system) could contribute with evidence in the periphery of nerve fibres in lesions (Tokushige 2006) and centrally – evidence for central sensitisation in women with endometriosis and pain (Bajaj 2003) and grey matter changes on MRI (As Sanie 2012).

The principle of intervention studies can be to remove or suppress endometriosis. Only 3 surgical RCTs have been performed to examine if lasering or excising endometriosis (compared to diagnostic laparoscopy) improves pain (Sutton 1994, Abbott 2004, Jarrell 2005). These had positive findings but had significant limitations. Cochrane reviews of medical treatment for pain in endometriosis include one RCT of an anti inflammatory (Kauppila 1985) and the following hormonal treatments: continuous progestagens and antiprogestagens and danazol which have level 1a evidence supporting their effect in pain, however, only one RCT of an cOCP has met the criteria for inclusion (Davis 2007) - cOCP as good as GnRH analogue in treating pain and one RCT of LNG-IUs post surgery which found a beneficial effect (Abou-Setta 2006).

The case for endometriosis not causing pain must mention those patients with recurrent pain and no recurrent endometriosis at second surgery (Vercellini 2009), asymptomatic patients, the poor correlation of stage of disease and pain and those who derive no benefit from surgery or medicine.



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REFERENCES:

1. Fred M Howard. Endometriosis and Mechanisms of Pelvic Pain. *J Minim Invasive Gynecol*. 2009 Sep-Oct;16(5):540-50
2. Pamela Stratton and Karen J Berkley. Chronic pelvic pain and endometriosis: translational evidence of the relationship and implications. *Hum Reprod Update*. 2011 May-Jun;17(3):327-46
3. Endometriosis: Science and Practice. Edited by Linda C.Giudice, Johannes L.H.Evers, David L.Healy. Wiley Blackwell 2012

AUTHOR AFFILIATION: Dr M Druitt; Fellow in Laparoscopic Gynaecology, Monash Medical Centre, Victoria, Australia.

SESSION 2 – KEYNOTE LECTURE / 1200-1230

Non-invasive methods for diagnosing endometriosis

D’Hooghe TM

At present, the only way to conclusively diagnose endometriosis is laparoscopic inspection, preferably with histological confirmation. This contributes to the delay in the diagnosis of endometriosis which is 6-11 years. So far non-invasive diagnostic approaches such as ultrasound, MRI or blood tests do not have sufficient diagnostic power. In a clinical practice dealing with women with subfertility with or without pain, a non-invasive test of endometriosis with high sensitivity would allow the identification of those women with endometriosis who could benefit from laparoscopic surgery reported to improve these symptoms, ie increase fertility and decrease pain (Kennedy et al., 2005; D’Hooghe et al., 2006).

As endometriosis can be progressive in up to 50% of women (D’Hooghe and Debrock, 2002), early noninvasive diagnosis has the potential to offer early treatment and prevent progression. Ideally, decreased levels of such a test during/after treatment would also correlate with decreased pelvic pain and increased fertility. Such a test would be useful especially in women with endometriosis which is not diagnosed by TVU. In a recent paper (Vodolazkaia et al, 2012), multivariate analysis of 4 biomarkers (Annexin V, VEGF, CA-125, sICAM-1/ or glycodelin) in plasma samples obtained during menstruation, enabled the diagnosis of endometriosis undetectable by ultrasound with sensitivity of 81-90% and specificity of 63-81% in independent training- and test data set.

The next step is to apply these models for preoperative prediction of endometriosis in an independent set of patients with infertility and/or pain without ultrasound evidence of endometriosis, scheduled for laparoscopy. Similar results have been achieved after proteomic analysis of blood samples (Fassbender et al, 2012a). Additionally, endometrial analysis for the presence of nerve fibers or for proteomic differences has also been studied as part of the development of a semi-invasive test for endometriosis (Bokor et al, 2009; Kyama et al, 2010; Fassbender et al, 2012b) During this presentation,

we will review the state of the art on noninvasive or semi-invasive diagnosis of endometriosis based on analysis of peripheral blood or endometrium, respectively.

REFERENCES:

1. Vodolazkaia A, El-Aalamat Y, Popovic D, Mihalyi A, Bossuyt X, Kyama CM, Fassbender A, Bokor A, Schols D, Huskens D, Meuleman C, Peeraer K, Tomassetti C, Gevaert O, Waelkens E, Kasran A, De Moor B, D’Hooghe TM. Evaluation of a panel of 28 biomarkers for a non-invasive diagnosis of endometriosis. *Hum Reprod Advance Access*, published June 26, 2012
2. Fassbender A, Waelkens e, Verbeek N, Kyama CM, Bokor A, Vodolazkaia A, Van de Plas R, Meuleman C, Peeraer K, Tomassetti C, Gevaert O, Ojeda F, De Moor B, D’Hooghe T. Proteomics analysis of plasma for early diagnosis of endometriosis. *Obstet Gynecol* 2012a Feb;119(2, Part 1):276-285. (impact factor 4.392) 10.1097/AOG.Ob013e31823fda8d [doi]
3. Fassbender A., Verbeek N, Börnigen D, Kyama CM, Bokor A, Vodolazkaia A, Peeraer K, Tomassetti C, Meuleman C, Gevaert O, Van de Plas R, Ojeda F, De Moor B, Moreau Y, Waelkens E, D’Hooghe TM. Combined mRNA microarray and proteomic analysis of eutopic endometrium of women with and without endometriosis. *Hum Reprod* 2012b Jul;27(7):2020-9. Epub 2012 May 3 (impact factor 4.357) 10.1093/humrep/des127[doi]
4. Bokor A, Kyama CM, Verduyck L, Fassbender A, Gevaert O, Vodolazkaia A, De Moor B, Fülöp V, D’Hooghe TM. Density of Small Diameter Sensory Nerve Fibres in Endometrium: a Semi-Invasive Diagnostic Test for Minimal to Mild Endometriosis. *Hum Reprod* 2009 Dec; 24(12): 3025-32. Published 18 August 2009, (impact factor: 3.543) 10.1093/humrep/dep283 [doi]

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SESSION 4 / 1610-1630

Bringing it all together – guidelines for management

Johnson N

BACKGROUND: A variety of guidelines on management of endometriosis have been issued by various authorities. Recently two consensus processes, one by the ACCEPT Group of RANZCOG and the other by the World Endometriosis Society, have been undertaken.

METHODS: The ACCEPT Group of RANZCOG employed a consensus process and made a consensus statement in 2012 on endometriosis and infertility¹ The World Endometriosis

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Society employed a consensus process and the consensus group is in the process of finalising a consensus statement on all aspects of management of endometriosis.

RESULTS: It is remarkable how little complete consensus can be attained when 'experts' get together! From 69 World Endometriosis Society consensus statements, none of the statements made achieved 100% agreement without expression of a caveat about either the statement or the strength of the statement; only seven of our 65 consensus statements were associated with a 0% disagreement rate from the survey respondents. Many statements from both consensus processes were based on weak evidence or no research evidence (however such statements could still be associated with a strong consensus). Some key issues, where research evidence to inform practice remains sparse, are: management of adolescents who have, or might have, endometriosis as well as intervention strategies in the younger age group designed to prevent endometriosis; lifestyle and dietary interventions; standardization of long term strategies for prevention of recurrent endometriosis; clarification of management strategies, both surgical and medical, for women with deep infiltrating endometriosis; development of standards of experience and expertise

required for surgeons undertaking advanced laparoscopic endometriosis surgery; standardization of centers/networks of expertise with regard to definition, accreditation and longevity; development of models of care in low resource settings. Nonetheless, a summary will be presented to 'bring it all together'.

CONCLUSION: Consensus processes, as well as being enjoyable and educational for those involved, hopefully allow sensible statements that can be used in a variety of settings to guide clinical practice.

REFERENCE:

1. Koch J, Rowan K, Rombauts L, Yazdani A, Chapman M, Johnson N. Endometriosis and infertility - a consensus statement from ACCEPT (Australasian CREI Consensus Expert Panel on Trial evidence). Aust N Z J Obstet Gynaecol 2012; 52:513-22.

AUTHOR AFFILIATION: Dr Neil Johnson; University of Auckland and Repromed Auckland, New Zealand.

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SESSION 5 – LIVE SURGERY / 0815-1030

Laparoscopic hysterectomy - evidence based guidelines

Nesbitt-Hawes E

Laparoscopic hysterectomy has gained in popularity since its introduction in the early 1990s. This technique is superior to abdominal hysterectomy with respect to blood loss, wound infection, hospital stay and recovery period.

During this live surgery session, current evidence will be reviewed including methods, complications, skill acquisition and learning curves, and factors that affect the success of the procedure.

AUTHOR AFFILIATION: Dr Erin Nesbitt-Hawes; Endogynaecology Fellow, Royal Hospital for Women, Randwick, New South Wales, Australia.

SESSION 5 – LIVE SURGERY / 0815-1030

Laparoscopic excision of endometriosis - evidence based guidelines

Chow J

A condensed, evidence-based overview of the surgical treatment of endometriosis is presented. A summary of endometriosis surgery in the clinical settings of pain, infertility and endometriomas is outlined. Areas of ongoing research are discussed.

AUTHOR AFFILIATION: Dr Jason Chow; Sydney West Advanced Pelvic Surgery Unit, Lecturer at the University of Western Sydney, New South Wales, Australia.-

SESSION 6 / 1100-1115

Endometriomas, AMH and fertility – the devil's triangle

Koch J

Juliette will discuss the clinical relevance of AMH, the levels found in patients with endometriosis and the impact of ovarian reserve on fertility. A review of recent literature on the impact of endometrioma surgery on AMH will be presented and the pros and cons of surgery in the setting of fertility will be outlined. Reference will be made to the recent CREI Consensus Statement on Endometriosis and Infertility.

AUTHOR AFFILIATION: Dr Juliette Koch; IVF Australia, Royal Hospital for Women, South Wales, Australia. Conjoint lecturer, University of New South Wales, Kensington, New South Wales, Australia.

SESSION 6 – KEYNOTE LECTURE / 1130-1200

Pain starts with a P not an E

Bajzak K

Chronic pelvic pain (CPP) is defined as non-menstrual/non-cyclic pelvic pain of at least 6 months duration. Chronic Pain Syndrome includes the following clinical characteristics: incomplete relief with most treatments, significantly impaired function at home and/or work, signs of depression (sleep, weight) and altered family roles. Treatment most often becomes focused on management rather than cure, restoring normal function and improving quality of life.

In the setting of chronic pain physiologic changes affecting the reproductive tract, surrounding viscera and musculoskeletal system can and most often do coexist. Assessment must be thorough and all components of pain must be treated concurrently. Organ systems involved include the GI tract (37%), Urinary (31%), Reproductive (20%) and MSK (12%).

Interstitial cystitis is poorly understood and few treatment regimens have proven efficacy. CPP is accompanied by irritative voiding symptoms, dyspareunia and often associated with a menstrual flare. Initially referred to as the "Evil Twins", endometriosis and interstitial cystitis often coexist. There is no consensus on diagnostic criteria or treatment.

Irritable bowel syndrome (IBS) is characterized by abdominal pain/discomfort associated with a change in bowel habits. Female patients often experience a worsening of symptoms during menses. IBS symptoms are present in 50-80% of female patients with CPP. ROME III criteria are used for diagnosis. Dietary management is the mainstay of therapy.

85% of patients with CPP have MSK dysfunction, including altered posture, abdominal wall involvement and pelvic muscle hypertonus. Sustained muscle contraction leads to microtrauma with release of vasoactive substances and nociceptor activation and ultimately to localized fibrosis or "trigger points".

REFERENCES:

1. Consensus Guidelines for the Management of CPP. SOGC Clinical Practice Guideline No. 164, August 2005
2. Pelvic Pain, Diagnosis and Management. Howard FM, Perry PC, Carter JE, El-Minawi AM. Lippincott Williams and Wilkins. Philadelphia. 2000
3. Breaking the cycle of pain in interstitial cystitis/painful bladder syndrome. Consensus Panel Recommendations. Forrest JB, Mishell Dr J of Reproductive Medicine. 2009; 54:3-14
4. Patients with CPP:Endometriosis or IC/PBS? Butrick CW. JSLS. 2007;11:182-189

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5. From IC to CPP. Persu C et al. *J Med Life*. 2010;1-8
6. The Diagnosis of IC revisited: Lessons learned from the National Institutes of health interstitial cystitis database study. Hanno PM et al. *J Urology*. 1999;161:553-557
7. Biopsy Features are associated with primary symptoms in IC: results from the IC database study. Tomaszewski JE et al. *Urology*. 2001;57:67-92
8. IBS and Functional Bowel Pain Syndrome: New Classification and Treatments. Drossman DA. Chapel Hill. Lecture presented at IPPS 14th Annual Scientific Meeting on CPP, 2006
9. IBS: clinical evaluation and management. Peura DA. Lecture at IPPS 17th annual scientific meeting on CPP. 2009. U of Virginia HSC
10. The Role of Pelvic Floor PT in the treatment of Pelvic and Genital Pain related Sexual Dysfunction. Rosenbaum TY, Owens A. *J Sex Med* 2008;5:513-523
11. PT in the management of women with CPP. Montenegro MLLS et al. *Int J Clin Pract* 2008;62:263-269

AUTHOR AFFILIATION: Dr Krisztina Bajzak; Assistant Professor & Research Director, Discipline of Obstetrics and Gynecology, Memorial University, Newfoundland, Canada.

SESSION 8 – THE PERPETUAL DAN O’CONNOR LECTURE / 1530-1600

From benchside to bedside – translating endometriosis research

Montgomery GW

Endometriosis is a chronic condition with significant health costs and effects on quality of life. Disease risk is influenced by both genetic and environmental factors, but mechanisms remain poorly understood. Fifteen years ago Dr Dan O’Connor supported a research program at the Queensland Institute of Medical Research by Dr Susan Treloar and Prof Nick Martin to recruit women with endometriosis cases to identify genes contributing to disease. This long term project has recently made important gene discoveries through the advances in genomics. Together with our collaborators in the International EndoGene Consortium and in Japan, we have identified the first gene regions associated with disease risk.

We have also shown that there is a stronger genetic contribution to severe disease and that the genes underlying risk are the same in both European and Japanese populations. The individual markers all have small effects and are not useful as tests to predict individual disease risk. The next step is to identify the specific genes and the pathways that contribute to disease and to translate these scientific advances into the clinic through development of more effective prevention, diagnosis or treatments.

AUTHOR AFFILIATION: Dr Grant W. Montgomery; Queensland Institute of Medical Research, Molecular Epidemiology Laboratory, Brisbane, Queensland, Australia.

SESSION 8 / 1600-1615

SILS – Single Incision Laparoscopic Surgery *Behnia-Willison F*

Single Incision Laparoscopic Surgery (SILS) represents the latest advancement in minimal invasive surgery combining the benefits of conventional laparoscopic surgery, such as less pain and faster recovery, with improved cosmesis. Although the successful use of this technique is well reported in general surgery and urology, there is a lack of studies on SILS in gynaecology. This procedure was first described in gynaecology by Wheeler for tubal ligation in 1969. In a recent literature review, a large variety of laparoscopic surgeries were performed through a single incision. The learning curve for laparoscopic gynaecologic operations and robotic gynaecologic surgeries has been reported in the literature, however it seems to be more challenging in SILS which requires more highly skilled surgeons and theatre staff. Operative time in SILS has been shown to decrease when experience has been gained by the surgeon, however there is also a learning curve for the theatre staff. The development of virtual reality models and animal labs have helped make the learning process easier for all novice users.

Most reported single incision surgeries are hysterectomies and ovarian cystectomies, however in our study the most common surgeries were series excision of endometriosis and adhesiolysis. We also performed SILS technique for pelvic floor reconstruction surgery. In this presentation we will discuss these procedures as well as the learning curve for SILS technique, addressing the questions ‘who is skilled enough to teach this surgery?’; and ‘who is potentially ready to learn the skills?’

AUTHOR AFFILIATION: Dr Fariba Behnia-Willison; Flinders University, Flinders Medical Centre, Adelaide, South Australia, Australia.

SESSION 8 / 1630-1645

Medical directions *Rombauts L*

Endometriosis is a complex disease in which estrogens, progesterone and its receptors play an important role in the pathogenesis. The development and maintenance of endometriotic lesions is also controlled by factors that regulate cell proliferation, apoptosis, immune function, angiogenesis and invasion.

The optimal management of endometriosis often relies on index surgery performed under ideal circumstances followed by individually-tailored medical treatment to manage residual symptoms and to reduce the risk of disease recurrence.

Unfortunately, both surgical and medical treatment often fall short in delivering acceptable outcomes for patients. Given the prevalence, the physical and psychological impact and the health-economic burden of endometriosis, it is vital that new treatments are developed which are better tolerated and more effective.



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A overview of the current pharmacological drugs in development will be provided in this lecture. There is an exciting variety of new agents in the pipeline, including new GnRH-antagonists, immune-modulators, angiogenesis inhibitors, selective progesterone receptor modulators, anti-oxidants and new classes of pain-killers.

The challenge for many of these drugs will be to show that the promising results in animal models translate to the clinic. Many have already failed this test in the past and many more will follow, but even one new effective drug would be a welcome addition to our arsenal.

AUTHOR AFFILIATION: Associate Professor Luk Rombauts; Department of Obstetrics & Gynaecology, Monash University, Melbourne, Victoria, Australia. Director of Clinical Research, Monash IVF, Hawthorn, Victoria, Australia.

SESSION 8 / 1645-1705

Robotics and endometriosis

Abrão M

Complete excision of deep infiltrating endometriosis poses a surgical challenge. Robotics provides features such as 3D imaging and articulation of instruments that may overcome many of the limitations of conventional laparoscopy.

The role of robotics in benign gynecology particularly in endometriosis as evidenced in the current literature will be discussed. Surgical videos will be presented.

AUTHOR AFFILIATION: Professor Mauricio Abrão; Director of Endometriosis Division, Ob/Gyn, Department, Sao Paulo University, Brazil. President, SBE - the Brazilian Endometriosis and Minimally Invasive Gynecology Association. Director, Reproductive Clinic, Sirio Libanes Hospital, Sao Paulo, Brazil.

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SESSION 9 / 0815-0845

Why is classification of endometriosis such a struggle?

Abrão M

Endometriosis is a prevalent disease that is one of the most important causes of pelvic pain. This enigmatic disease can behave like a malignant tumor, causing adhesions, distortion of pelvic anatomy and invasion of adjacent organs. Deep endometriosis was first described by Cornillie in 1990. Since then, it has been shown to be highly associated with significant pain and infertility. The current classification systems, of which the ASRM (1997) is the most commonly utilized, do not, however, include the concept of deep endometriosis and its significant implications. In order to address deep endometriosis and other clinically relevant aspects of this disease, the AAGL SIG on Reproductive Surgery and Endometriosis has determined that it is imperative and timely to develop a new classification system. Recently, AAGL created a new endometriosis classification system. Thirty internationally-recognized experts in endometriosis surgery have been approached to contribute to the initial phase of this project. Ultimately, our goal would be that this new classification system be utilized to further our understanding of this still perplexing disease, including the frequent symptom of pain.

AUTHOR AFFILIATION: Professor Mauricio Abrão; Director of Endometriosis Division, Ob/Gyn, Department, Sao Paulo University, Brazil. President, SBE - the Brazilian Endometriosis and Minimally Invasive Gynecology Association. Director, Reproductive Clinic, Sirio Libanes Hospital, Sao Paulo, Brazil.

SESSION 9 / 0845-0905

Interstitial cystitis

Rosamília A

Your doctor may have made the diagnosis of interstitial cystitis; this leaflet may help you to understand your condition

INTERSTITIAL CYSTITIS/PAINFUL BLADDER SYNDROME/BLADDER PAIN SYNDROME

- What is interstitial cystitis ?
- What causes interstitial cystitis?
- How does my doctor know that I have interstitial cystitis ?
- How interstitial cystitis is treated ?

What is interstitial cystitis?

Interstitial cystitis (IC) is a term used to describe the condition of bladder pain or discomfort, with a frequent

and often urgent need to pass urine. Nine in ten people with IC are women. People with interstitial cystitis may have a bladder wall that is inflamed and irritated (red and painful). In severe cases, the bladder wall inflammation may make the bladder wall less flexible and stiffer inflammation can scar and stiffen the bladder so it can't easily expand as urine fills it that may lead to pain and frequency and urgency. Some women get pin point bleeding of the bladder wall when it is stretched or have ulcers or fissures of the bladder lining. Painful Bladder Syndrome (PBS) is another name for the condition when there is no abnormality visible in the bladder. Bladder Pain Syndrome is the name suggested to include both IC and PBS.

People with interstitial cystitis may have many of the following symptoms:

- An urgent need to urinate, both in the daytime and during the night
- Frequent need to urinate. Women with severe cases of IC may urinate as many as 20 times a day or more.
- Pressure, pain and tenderness around the bladder, pelvis and perineum (the area between the anus and vagina). This pain and pressure may increase as the bladder fills and decrease as the bladder empties.
- A bladder that won't hold as much urine as it did before
- Pain during sexual intercourse

The symptoms of IC vary greatly from person to person and even in the same individual. Treatment depends on the severity of the symptoms.

In many women, the symptoms get worse before their menstrual period. Stress may also make the symptoms worse, but it doesn't cause them.

What causes interstitial cystitis?

We don't yet know what causes interstitial cystitis. We do know that infections with bacteria or viruses don't cause it. It might be caused by a defect in the lining of the bladder. Normally, the lining protects the bladder wall from the toxic effects of urine. In about 70 percent of people with interstitial cystitis, the protective layer lining the bladder is "leaky." This may let urine irritate the bladder wall, causing interstitial cystitis.

Other changes seen include an increase of histamine (produced due to the inflammation process)-producing cells and increased nerve cells in the bladder wall. An autoimmune response (when antibodies are made that act against a part of the body such as rheumatoid arthritis) may also be the cause in some people.

How does my doctor know I have interstitial cystitis?

You may have interstitial cystitis if any of the following occur:

- You have to urinate often or urgently
- You have persistent pelvic or bladder pain



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- A doctor finds bladder wall inflammation, pinpoint bleeding or ulcers during an exam with a special telescope (called a cystoscope) that looks inside your bladder
- Your doctor has ruled out other diseases such as urinary tract infections, vaginal infections, bladder cancer, sexually transmitted diseases. Diagnostic tests that help identify other conditions include urinalysis, urine culture, urine cytology, cystoscopy with distension of the bladder under anaesthesia, and occasionally biopsy of the bladder wall.

How is interstitial cystitis treated?

Because the causes of IC are unknown, current treatments are aimed at relieving symptoms. One or a combination of treatments helps most people for variable periods. As researchers learn more about IC, the list of potential treatments will change, so patients should discuss their options with a doctor.

Most people feel better after trying one or more of the following treatments:

- Diet. You may need to avoid alcohol, spicy, acidic foods and tobacco.
- Bladder distension. About one third of people feel better after having a bladder distension. Under anaesthesia, a doctor overfills your bladder with fluid. This stretches the walls of the bladder. Doctors don't know why distension helps. It may interfere with pain signals sent by nerves in the bladder. In some people they feel their pain is worse after this procedure
- Medication. Your doctor may have you take an oral medicine called pentosan polysulfate (brand name: Elmiron). This medicine helps to protect the lining of the bladder wall from the toxic parts of urine. Elmiron may be expensive in some countries. It helps about 40% of patients.

Another medicine that may help is amitriptyline (brand name: Endep). It blocks pain and reduces bladder spasms. This medicine can make you sleepy, so it's usually taken at bedtime.

Oral antihistamines or cimetidine have helped some patients with an allergic tendency.

Physical therapies and trigger point therapy can help the pelvic floor muscle spasm that accompanies bladder pain syndrome.

Bladder instillation. During a bladder instillation, a catheter (a thin tube) is used to fill your bladder with a liquid medicine. You hold the medicine inside your bladder for a few seconds to 15 minutes. Then the liquid drains out through the catheter. Treatments are given every one to two weeks for six to eight weeks. The treatment can be repeated as needed. The substances used can include

- Heparin alone or in combination
- Steroids alone or in combination
- Local anaesthetic with or without sodium bicarbonate
- Dimethyl sulfoxide or DMSO (Rimso-50), a chemical solvent from wood pulp which has several uses in medicine. It is known to reduce inflammation and block pain in about 3/4 of IC patients. It has the side-effect of leaving patients smelling of garlic that may last up to 72 hours after treatment.

Difficult Cases

Some treatments which are being currently assessed for people who do not respond to the above options include botulinum toxin bladder injection and sacral nerve stimulation. Some people need stronger pain medication such as morphine like drugs or gabapentin (nerve modulating drugs). Referral to a multidisciplinary pain clinic may be of benefit in severe cases. An extremely small minority of patients are not helped with regular treatments and require surgery. Many approaches and techniques are used, each of which has its own advantages and complications that should be discussed with a surgeon. Surgery should be considered only if all available treatments have failed and the pain is disabling.

What else can I do to help my symptoms?

- Diet - Alcohol, tomatoes, spices, chocolate, caffeine, citrus drinks, artificial sweeteners and acidic foods may irritate your bladder. Try eliminating these foods from your diet for a couple of weeks. Then try eating one food at a time to see if it makes your symptoms worse.
- Smoking - Many people with interstitial cystitis find that smoking makes their symptoms worse. Because smoking is also a main cause of bladder cancer, people with interstitial cystitis have another good reason to quit smoking.
- Bladder training - If you have no pain, many people can train their bladder to hold more. You can train your bladder by going to the bathroom at scheduled times and using relaxation techniques. After a while, you try to make the time you can wait longer. Your physiotherapist can help you with bladder training and relaxation techniques.
- Physical therapy and biofeedback - People with interstitial cystitis may have painful spasms of the pelvic floor muscles. If you have muscle spasms, you can learn exercises to help strengthen and relax your pelvic floor muscles.
- TENS ("transcutaneous electrical nerve stimulation"). You can use a TENS machine to put mild electrical pulses often over the bladderdo this at least two times a day. You might do it for a few minutes, or you might do it for a longer time. Ideally, this is commenced under the supervision of a physical therapist.
- Relaxation therapy, stress reduction, hypnotherapy and acupuncture can have a beneficial role in some people.

Where can I get more information about interstitial cystitis?

The support of family, friends and other people with interstitial cystitis is very important to help you cope with this problem. People who learn about interstitial cystitis and participate in their own care do better than people who don't.

People with interstitial cystitis can get more information on this disease from these groups:

- Interstitial Cystitis Support Group of Australia
Chairman: Alice Terry
P.O. Box 767, Kingswood
2747 New South Wales Australia
<http://www.users.bigpond.net.au/ICSG/>

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- Interstitial Cystitis Support Group
Mercy Hospital for Women
Clarendon Street,
East Melbourne, 3002 Victoria Australia
Phone : (03) 8458 4444
Contact: Christine Murray

Websites for further information:

- Interstitial Cystitis Network (Australia)
<http://www.icnaustralia.com/>
- Interstitial Cystitis Association
<http://www.ichelp.org/>

This handout provides a general overview on this topic and may not apply to everyone. To find out if this handout applies to you and to get more information on this subject, talk to your doctor.

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Victoria, Australia.

SESSION 9 / 0905-0925

Musculoskeletal issues

Hallam T

Pelvic pain of greater than 6months duration has commonly been sub-categorised into one of two broad, yet distinct clinical entities. The term CPP or 'chronic pelvic pain', has tended to be allocated when the clinical assumption has been one of underlying visceral pathology, whilst 'chronic pelvic girdle pain' has been used when the assumed pathophysiology has been one of orthopaedic/myofascial dysfunction of the sacroiliac joint, pubic symphysis and/or external pelvic musculature.

There is no doubt that this historical demarcation of pelvic pain into either visceral (chronic pelvic pain) or somatic (chronic pelvic girdle pain) has enabled a clear, simple distinction between the role of the physiotherapist and gynaecologist for the patient presenting with pelvic pain. However, recent advances in understanding the pathophysiological mechanisms behind chronic pelvic pain have now led to questions surrounding a model that attempts to demarcate chronic pelvic pain as either visceral OR somatic. This presentation will therefore have two main foci.

PART ONE

The presentation will begin by exploring the anatomical research now implicating myofascial dysfunction as a possible factor in chronic gynaecological pelvic pain. Direct musculoskeletal pain mechanisms including myofascial trigger point referral patterns, as well as muscular hypertonicity and associated myalgia will be discussed. In addition, recent research surrounding theories of viscerosomatic and somato-visceral convergence, antidromic propagation and the possible role of myofascial dysfunction in neurogenic inflammation within the viscera will be discussed.

PART TWO

This possibility that myofascial dysfunction may contribute to chronic "gynaecological" pelvic pain has now led to challenges for both the gynaecologist, whose expertise has traditionally been focused on visceral pathology, and the physiotherapist whose expertise has tended to focus on myofascial dysfunction. For the physiotherapist, whose traditional area of expertise has been the anatomy and physiology of striated skeletal muscle, the challenge is to now develop the necessary knowledge to assess and monitor changes in visceral symptomatology that may be impacted by a myofascial approach. In contrast, for the gynaecologist, whose area of expertise has traditionally been visceral pathology, the challenge is to now identify the subgroup of patients in which myofascial dysfunction may be of relevance.

Many assessments of myofascial dysfunction utilise specialised equipment including SEMG, manometry and 3D ultrasound. However, baseline screening of myofascial dysfunction can occur during a routine vaginal examination involving observation, palpation and functional assessment of both the levator ani and obturator internus. The second half of this presentation will therefore provide instruction on the observation of function and use of palpation in the screening of pelvic floor and obturator internus myofascial dysfunction which may be related to CPP. Cadaver images will be utilised to provide a detailed understanding of anatomical landmarks that can be utilised when undertaking a vaginal examination to assess the internal musculature.

REFERENCES:

1. Abbott JA, Jarvis SK, Lyons SD, Thomson A and Vancaillie TG 2006, Botulinum toxin type A for chronic pain and pelvic floor spasm in women: a randomized controlled trial, *Obstet Gynecol*, vol 108, no.4, 915-923
2. Fitzgerald M, Payne C, Lukacz E, Yang C, Peters K, Chair T et al 2012, Randomized multicentre clinical trial of myofascial physical therapy in women with interstitial cystitis/painful bladder syndrome and pelvic floor tenderness, *The Journal of Urology*, vol 187, issue 6, pp 2113-2118
3. George S, Clinton S and Borello-France D 2013, Physical Therapy Management of Female Chronic Pelvic Pain: Anatomical Considerations, *Clinical Anatomy*, vol 26, pp77-88
4. Hoffman D 2011, Understanding multisymptom presentations in chronic pelvic pain: the inter-relationships between the viscera and myofascial pelvic floor dysfunction, *Curr Pain Headache Rep*, vol 15, pp 343-346
5. Jantos M 2007, Understanding Chronic Pelvic Pain, *Pelvipereineology*, vol 26, pp66-69
6. Kavvadias T, Pelikan S, Roth P, Baessler K, Scheussler B 2013, Pelvic floor muscle tenderness in asymptomatic, nulliparous women: topographical distribution and reliability of a visual analogue scale, *International Urogynaecology Journal*, vol 24, issue 2, pp. 281-286.
7. Khachikyan I, Sinaii N, Shah J et al 2010, CNS sensitisation and myofascial dysfunction in patients with endometriosis and chronic pelvic pain, 66th Annual



Program Abstracts - Saturday 9 March

Meeting of the American Society for Reproductive Medicine (ASRM) Denver

8. Kotarinos R 2012, Myofascial pelvic pain, *Current Pain and Headache Reports*, vol 16, issue 5, pp 433-438 Langford C, Nagy S and Ghoniem G 2007, Levator Ani trigger point injections: an underutilized treatment for chronic pelvic pain, vol 26, issue 1, pp 59-62
9. Montenegro M, Gomide L, Mateus-Vasconcelos E, Rosse-Silva J, Candido-dos-Reis F, Nogueira A and Poli-Neto O 2009, Abdominal myofascial pain syndrome must be considered in the differential diagnosis of chronic pelvic pain, *European Journal of Obstetrics and Gynecology and Reproductive Biology*, vol 137, issue 1, pp 21-24
10. Montenegro M, Mateus-Vasconcelos E, do Reis F, Silva J, Novueira A and Neto O 2010, Thiele massage as a therapeutic option for women with chronic pelvic pain caused by tenderness of pelvic floor muscles, *Journal of Evaluation in Clinical Practice*, vol 16, 981-982
11. Pastore E and Katzman W 2012, Recognizing myofascial pain in the female patient with chronic pelvic pain, *Journal of Obstetric, Gynecologic and Neonatal Nursing*, vol 41, issue 5, no. 680-691
12. Rogers R 1999, Basic Neuroanatomy for Understanding Pelvic Pain, *The Journal of the American Association of Gynaecologic Laparoscopists*, vol 6, no. 1, pp15-29
13. Tu F, As-Sanie S, Steege J 2006 Prevalence of pelvic musculoskeletal disorders in a female chronic pain clinic, *Journal of Reproductive Medicine*, vol 5, pp185-189
14. Tu F, Fitzgerald C, Kuiken T, Farrell T, Norman H 2007, Comparative measurement of pelvic floor pain sensitivity in chronic pelvic pain, *Obstet Gynecol*, vol 110, pp1244-1248
15. Weiss P, Rich J and Swisher E 2012, Pelvic Floor spasm: the missing link in chronic pelvic pain, *Contemporary Ob/Gyn*, online published Oct 01, 2012
16. Won H and Abbott J 2010, Optimal management of chronic cyclical pelvic pain: an evidence-based and pragmatic approach, *International Journal of Women's Health*, vol 2, pp263-277

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SESSION 10 / 1130-1200

The price of pain *D'Hooghe TM*

The price of endometriosis-associated pain will be discussed based on a systematic review and on 2 studies sponsored by the World Endometriosis Research Foundation: the Endocost study and the Global Study on Women's Health (GSWH).

The GSWH study (Nnoaham et al, 2012) assessed the impact of endometriosis on health-related quality of life (HRQoL) and work productivity prospectively in 16 clinical

centers in 10 countries, including 1,418 premenopausal women without a previous surgical diagnosis of endometriosis, having laparoscopy to investigate symptoms or to be sterilized. There was a delay of 6.7 years, principally in primary care, between onset of symptoms and a surgical diagnosis of endometriosis, which was longer in centers where women received predominantly state-funded health care (8.3 vs. 5.5 years). Delay was positively associated with the number of pelvic symptoms (chronic pelvic pain, dysmenorrhoea, dyspareunia, and heavy periods) and a higher body mass index. Physical HRQoL was significantly reduced in affected women compared with those with similar symptoms and no endometriosis. Each affected woman lost on average 10.8 hours (SD 12.2) of work weekly, mainly owing to reduced effectiveness while working. Loss of work productivity translated into significant costs per woman/week, from US\$4 in Nigeria to US\$456 in Italy (Nnoaham et al, 2012).

In a systematic review of cost-of-illness analyses quantifying the economic impact of endometriosis and cost analyses calculating diagnostic and treatment costs of endometriosis, annual healthcare costs and costs of productivity loss associated with endometriosis were estimated at \$2,801 and \$1,023 per patient, respectively (Simoens et al, 2007). Extrapolating these findings to the US population, this study calculated that annual costs of endometriosis attained \$22 billion in 2002 assuming a 10% prevalence rate among women of reproductive age. These costs are considerably higher than those related to Crohn's disease or to migraine. Based on this review, it was not possible to determine whether a medical approach is less expensive than a surgical approach in the treatment of patients with endometriosis presenting with chronic pelvic pain (Simoens et al, 2007).

The ENDOCOST study was a prospective, international, multi-centre questionnaire-based survey which measured costs and quality of life of women with endometriosis-associated symptoms in ambulatory care and in 12 tertiary care centres in ten countries (Simoens et al, 2012). Data analysis of 909 women demonstrated that the average annual total cost per woman was €9,579 (95% CI €8,559-€10,599). Costs of productivity loss of €6,298 per woman were double the health care costs (€3,113 per woman). Health care costs were mainly due to surgery (29%), monitoring tests (19%) and hospitalization (18%). Endometriosis-associated symptoms generated 0.809 quality-adjusted life years per woman. Decreased quality of life was the most important predictor of direct health care and total costs. Costs were greater with increasing severity of endometriosis, presence of pelvic pain, presence of infertility, and higher number of years since diagnosis. These data demonstrate that the economic burden associated with endometriosis treated in referral centres is high and is similar to other chronic diseases (diabetes, Crohn's disease, rheumatoid arthritis). It arises predominantly from productivity loss, and is predicted by decreased quality of life.

In conclusion, endometriosis impairs HRQoL and work productivity across countries and ethnicities, yet women continue to experience diagnostic delays in primary care. Decreased quality of life is the most important predictor of direct health care and total costs, that increase with increasing severity of endometriosis, presence of pelvic pain, presence of infertility, and higher number of years since diagnosis.

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REFERENCES:

1. Simoens S, Hummelshoj L, D'Hooghe TM. Endometriosis: cost estimates and methodological perspective. *Hum Reprod Update* 2007;13:395-404
2. Simoens S, Hummelshoj L, Dunselman G, Brandes I, Dirksen C, EndoCost Consortium, D'Hooghe T. Endometriosis cost assessment (the EndoCost study): a cost-of-illness study protocol. *Gynecol Obstet Inves* 2011;71(3):170-6
3. Nnoaham KE, Hummelshoj LH, Webster P, D'Hooghe T, De Cicco Nardone F, De Cicco Nardone C, Jenkinson C, Kennedy SH, Zondervan KT on behalf of the WERF GSWH consortium. Impact of endometriosis on quality of life and work productivity: A multi-centre study across 10 countries. *Fertil Steril* 2011;96(2):366-373
4. Simoens S, Meuleman C, D'Hooghe T. Non-health care costs associated with endometriosis. *Hum Reprod* 2011;26(9):2363-2367
5. Simoens S, Dunselman G, Dirksen C, Hummelshoj L, Bokor, A, Brandes I, Brodsky V, Canis M, Colombo GL, DeLeire T, Falcone T, Graham B, Halis G, Horne A, Kanj O, Kjer JJ, Kristensen J, Lebovic D, Mueller M, Vignano P, Wullschlegel M, D'Hooghe T. The burden of endometriosis: costs and quality of life of women with endometriosis treated in referral centres. *Hum Reprod* 2012;27(5):1292-9

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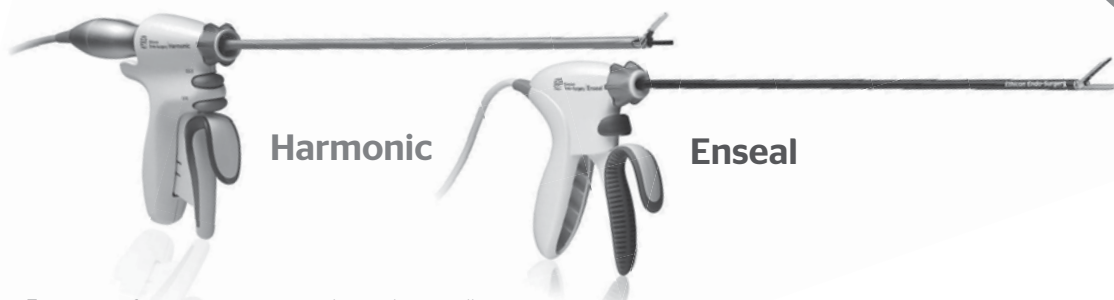
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The Pelvis in Pain Endometriosis and Beyond

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SESSION 3 - FREE COMMUNICATIONS I /
1330-1340

The effect of Trendelenburg tilt on cognitive function

Lee S, Tan A, Griffiths J, Ang C

A Trendelenburg tilt is used almost ubiquitously in gynaecological laparoscopic surgery. When laparoscopy was used only for diagnosis, the duration of this procedure would last for only half an hour. As operative procedures have increased in complexity, so has the length of procedures. For example, the duration of operative procedures such as total laparoscopic hysterectomies can last for three hours, especially during the learning curve.

Some studies suggest that there is an increase in cerebral oedema from the use of Trendelenburg tilt with an established carbon dioxide pneumoperitoneum. There have also been studies demonstrating deterioration in cognitive testing in elderly patients following general anaesthetic. One study has described no difference in cerebral oedema after Trendelenburg tilt in gynaecological laparoscopic procedures. However, the literature is sparse and studies differ in methodology. These results make it difficult to know the effect, if any, of Trendelenburg tilt on patients' cognitive function.

The researchers performed paired analysis of 10 participants' cognitive function immediately before, immediately after, and 4 weeks after Trendelenburg tilt. By removing the main confounding factors such as general anaesthesia and its associated drugs, and carbon dioxide pneumoperitoneum, the intention of this project is to establish if Trendelenburg tilt in isolation has any immediate or lasting effect on cognitive function.

The results from this research project are presented and the future direction of our investigation into the cognitive effects of Trendelenburg tilt is outlined.

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SESSION 3 - FREE COMMUNICATIONS I /
1340-1350

Laparoscopic management of an adnexal mass during the second trimester of pregnancy

Georgiou C

The incidence of pregnant women requiring non-obstetric related abdominal surgery is not a rare clinical presentation. The reported incidence is approximately 1:500.

One of the gynaecological indications for this type of surgery is the presence of an ovarian mass with malignant potential in an otherwise asymptomatic pregnant patient.

Elective surgery during pregnancy is usually performed during the second trimester. If possible, deferring surgery to this trimester allows for the period of relatively high miscarriage rate to pass.

During the second trimester, in the absence of a definitive diagnosis and the possibility of non-benign pathology, the decision whether to perform a laparotomy or a laparoscopic procedure is controversial.

However, if laparoscopy is contemplated the enlarging uterine mass may pose significant risks to the patient and the developing fetus.

Prior to embarking on the procedure consultation with gynae oncology is advisable and discussion with the patient with respect to the definitive approach, possible complications and diagnosis should be mandatory.

This presentation describes the management of such a case in a 24 yr old woman in her second pregnancy with an adnexal mass identified during the first trimester dating scan. Following consultation with the gynae oncologists a salpingoophrectomy was scheduled during the second trimester. The included video demonstrates the laparoscopic procedure resulting in the removal of the enlarged ovary located within the Pouch of Douglas.

In addition, a review of the literature with respect to laparoscopy during pregnancy is included.

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SESSION 3 - FREE COMMUNICATIONS I /
1350-1400

3D ultrasound of the pelvic floor – a reproducibility study

Nesbitt-Hawes EM, Dietz HP, Abbott JA

OBJECTIVE: To confirm the reproducibility of three-dimensional ultrasound (3D US) images of the pelvic floor performed in a general gynaecology clinic setting.

METHODS: A prospective observational study was performed. Thirty women attending a general gynaecology clinic for any reason were approached to participate. A translabial 3D US of the pelvic floor was performed in the supine position after voiding. Biometric indices of the pubovisceral muscle as well as the levator hiatus were taken at rest, with pelvic floor contraction and on Valsalva manoeuvre. The measurements were sent for test-retest analysis by an expert in the field. Interclass correlation

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coefficients were performed to assess the reproducibility of the measurements.

RESULTS: Thirty six patients had 3D US of the pelvic floor. The women had a mean age of 39 and BMI of 26. 26/36 women were nulliparous. The data are currently undergoing analysis and will be complete by the end of February.

CONCLUSIONS: Pelvic pain is a common gynaecological presentation that affects up to 15% of reproductive aged women. The pelvic floor contributes to pain in many of these women, however there are few options for screening or objectively assessing the muscles of the pelvic floor. In this novel study pelvic floor muscles were assessed in a static and dynamic manner to consider if 3D ultrasound could be used as a tool to assess pelvic pain. Images and measurements were found to be reproducible and data collection for a nomogram is underway.

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SESSION 3 - FREE COMMUNICATIONS I / 1400-1410

Should bilateral salpingectomy be a routine part of hysterectomy?

Manley T, Tsaltas J, Najjar H

This presentation will include an introduction and background to the fallopian tube as a primary source of serous carcinomas, a discussion of the proposed benefits of salpingectomy and a proposed guideline for clinical practice.

CONFLICT OF INTEREST: There is no known conflict of interest.

OUTLINE: Since 2004 evidence suggests that serous carcinomas originate from the fallopian tube. Removal of the fallopian tubes at the time of hysterectomy may be one way of reducing the lifetime ovarian cancer risk in women not otherwise at increased risk. As there currently is no evidence that implementing this strategy will reduce the ovarian cancer risk the RANZCOG statement aligns with the Society of Gynecologic Oncology of Canada (GOC) which encourages discussion regarding the benefits and risks of salpingectomy at the time of hysterectomy with each patient.

There is no reported morbidity associated with post reproductive salpingectomy, which raises the question of whether this should be used as the default method of female sterilization. This in turn may also reduce the lifetime ovarian cancer risk and prevent future benign tubal pathology. Salpingectomy as a form of female sterilization may be particularly useful in women requesting the procedure who are >35 years old given that this cohort of women are unlikely to regret the decision in the future.

REFERENCES:

1. Dietl J, Wischhusen J, Häusler SF. The post-reproductive Fallopian tube: better removed? *Hum Reprod* 2011; 26 (11): 2918-24. Epub 2011 Aug 16

2. The Society of Gynecologic Oncology of Canada. Position statement regarding salpingectomy and ovarian cancer prevention. Sept 15, 2011. Accessed January 2012
3. The Royal Australian and New Zealand College of Obstetricians and Gynaecologists. College Statement C-Gyn 25. Managing the adnexae at the time of hysterectomy for benign gynaecological disease. November 2012. Accessed January 2013

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SESSION 3 - FREE COMMUNICATIONS I / 1420-1430

Predictors of prolapse recurrence following laparoscopic sacrocolpopexy

Wong V, Guzman-Rojas R, Shek KL, Chou D, K. Moore K, Dietz HP

BACKGROUND: This was a retrospective observational study to determine effectiveness of laparoscopic sacro-/hysterocolpopexy and to identify predictors for prolapse recurrence.

METHODS: This was an external audit of 209 patients after laparoscopic sacro-/hysterocolpopexy at a tertiary unit between Jan 2005 and June 2012. All participants were invited for a standardised interview, clinical examination (ICS POP-Q) at maximal valsalva and 4D transperineal ultrasound (US) as previously described². Offline analysis of US volumes for pelvic organ descent and levator morphobiometry was performed with proprietary software, blinded against all clinical data. Main outcome measures were recurrent prolapse symptoms (lump/drag), recurrence on clinical examination (ICS POP-Q \geq Stage 2) and prolapse recurrence on US (defined as cystocele \geq 10mm below the symphysis pubis (SP) or uterine prolapse/enterocele at or below the SP and/or descent of the rectal ampulla \geq 15mm below the SP)³. Potential predictors of recurrence were identified using univariate analysis and multivariate regression. The study was approved by the local human research ethics committee.

RESULTS: One hundred patients (48% of those originally operated) attended a follow-up. Mean follow-up was 3.03 yrs [0.13-6.87]), mean age 59.8 (28.1-77.4), median parity 2 (0-8) and mean BMI 27 (19-40). Pre-operatively, all patients had a \geq Stage 2 prolapse. 97 had a laparoscopic sacrocolpopexy, 3 a laparoscopic sacrohysteropexy. At follow-up, 88 patients considered themselves cured/improved and 32 had prolapse symptoms. On clinical exam, there were 61 cystoceles, 43 rectoceles but only 1 vault recurrences. None of the patients were re-operated for prolapse. Sonographic recurrence of the anterior compartment was seen in 53, uterine/enterocele in 12 and rectocele in 65. Forty had a levator avulsion (18 unilateral, 22 bilateral), mean hiatal area was 32.5 (15.2 – 60.1) cm².

Risk factors for prolapse recurrence were tested on univariate analysis with the state of the patient's pelvic floor the only consistent predictor. On multivariate analysis, hiatal area (P



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<0.0001, OR 1.15 [1.07-1.24]) and preoperative cystocele staging ($P=0.029$, OR 1.80 [1.06-3.04]) remained significant predictors of ultrasound recurrence. Levator avulsion did not remain independently significant. Similarly hiatal area was the only predictor for clinical recurrence ($P=0.001$, OR 1.19 [1.08-1.32]). This implies an increase in recurrence risk of 15% and 19% per cm^2 respectively.

CONCLUSION: In a series of 100 patients seen on average 3 years after laparoscopic sacro-/hysterocolpopexy, the apical support remained excellent. Anatomical recurrences were exclusively in the anterior and posterior compartment. Hiatal area was the most consistent predictor of recurrence.

REFERENCES:

1. AJOG 2005; 192(5):1752-1758
2. UOG 2004; 23(6):615-625
3. UOG 2007; 29:688-691

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SESSION 3 - FREE COMMUNICATIONS I / 1430-1440

Not a fibroid – application of myosure to non-myoma pathology

Nesbitt-Hawes EM, Abbott JA

OBJECTIVE: To report on the application of the Myosure™ hysteroscopic morcellator to non-myoma pathology.

METHODS: A prospective observational study was performed. Eleven women who presented for gynaecology review were identified as possible candidates to be treated with the Myosure™ device. Pathology included polyps, retained products of conception, silent miscarriage in the presence of previous Asherman syndrome and uterine septae, diagnosed preoperatively with ultrasound. Demographic data were obtained. The morcellator was used according to the manufacturer's instructions. Intraoperative data was collected and analysed.

RESULTS: There were 11 cases of morcellation of non-myoma pathology in the period between July and December 2012. This included 8 cases of polyps, 1 retained products of conception, 1 miscarriage and 1 uterine septum. All cases were completed successfully using the morcellator. The primary operator was an ITP or advanced trainee for 8/11 (72%) of cases. The average cutting time was 6 min 53sec and the saline deficit 1352mL. The pathology was removed completely in 9/11 (82%) of the cases and there were no intra-operative or post-operative complications. 10/11(91%) were performed without the requirement of prior cervical dilatation. Vision was 100% for the majority of cases 10/11(91%), however due to the

vascularity seen with the removal of the miscarriage the vision was reduced to 50-75%.

CONCLUSIONS: The Myosure™ hysteroscopic morcellator can be used successfully on non-myoma pathology including polyps and retained products of conception. There are limited data in the literature at this time on complications following hysteroscopic morcellation and in this small sample there were no complications. The procedure is time efficient and does not require cervical dilatation for the majority of cases making outpatient utilisation a possibility. Its ease of use means that less training time and ability is required to perform resection with a good chance of complete removal of pathology, however these benefits must be balanced against the cost of the device when compared to the standard resectoscope.

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SESSION 3 - FREE COMMUNICATIONS I / 1440-1450

XCEL Bladeless Trocar versus Veress Needle: A randomised controlled trial comparing these two entry techniques in gynaecological laparoscopic surgery

Manley T, Wright P, Vollenhoven B, Tsaltas J, Lawrence A, Najjar H, Pearce S, Tan, Chan K-W, Wang L, Amir M, Fernandes H, Hyde S, Grant P, Mcilwaine K, Cameron M

This presentation would include a brief overview of the trial as well as a video presentation showing the entry technique using the XCEL bladeless trocar

CONFLICT OF INTEREST: The trial XCEL ports for this study were donated by the manufacture (Johnson & Johnson) but were in no other way associated with the trial.

OBJECTIVE: To evaluate the efficiency of the XCEL Bladeless Trocar versus the Veress needle in laparoscopic primary port entry.

DESIGN: Randomised controlled study.

SETTING: Monash Medical Centre and The Mercy Hospital for Women (tertiary teaching hospitals) Melbourne, Victoria, Australia.

METHODS: Ethics approval has been gained from each site. This trial is registered with clinicaltrials.gov. Registration No. TRM-001.

Women were recruited to this study at these two centres. Once recruited, patients were randomly assigned one of two entry techniques, either Veress (control) or XCEL Bladeless trocar. The primary end point was time from first skin incision to operating pressure achieved with telescope in the abdomen.

RESULTS: Complete data was available for 127 women enrolled in the study. There were no major or minor

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complications recorded in the study population. Time to create a pneumoperitoneum was significantly faster in the XCEL bladeless trocar arm (mean difference 175 sec, $p < 0.001$). This result remained significant when taking into account previous surgery, be it, open or laparoscopic and type of laparoscopy (type 1-4). The percentage of total operating time taken for entry was significantly less for the XCEL bladeless trocar (5.6% less time, $p < 0.001$).

CONCLUSION: This trial has shown that a pneumoperitoneum required for laparoscopic surgery is significantly slower to achieve with the Veress Needle compared to the XCEL bladeless trocar.

The safety profile of these two entry techniques is understandably an important issue when deciding on primary port entry at laparoscopy. The Xcel Bladeless trocar may help to eliminate some of the safety concerns related to the Veress needle but a much larger trial powered for this question would need to be done before a conclusion could be made.

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SESSION 3 - FREE COMMUNICATIONS I / 1440-1500

Rectovaginal endometriosis in obese women. Is surgery more complicated?

Edmonds S, Barclay D, Van der Merwe A, Israel L, Peng S-L

OBJECTIVE: Deeply infiltrating endometriosis is known to be associated with a lower Body Mass Index (BMI)¹. Surgery in this cohort of patients is technically challenging and this may be further complicated in the obese patient. This prospective study reviews a socio-economically deprived population in South Auckland that has high levels of obesity and examines the outcomes and complications in excision of rectovaginal endometriosis associated with the obese patient. All women had previously undergone a staging laparoscopy.

RESULTS: A total of 32 women underwent surgery over the 18 month study period, with a BMI range of 17 to 43 Kg/m², median 30 Kg/m². In this group, 19% (6) were overweight (BMI > 25 Kg/m²), 28% (9) were obese (BMI 30-40 Kg/m²) and 16% (5) morbidly obese (BMI > 40 Kg/m²). The remaining 37% (12) had a BMI < 25 Kg/m².

Surgery was completed laparoscopically in 21 (66%) women, of whom 19 had pure excision of disease and a further 2 included hysterectomy. Laparotomy was performed in the remaining 11 (34%), including 2 women who had pure excision alone, 1 myomectomy, 7 hysterectomies (including 1 Crohns stoma refashioning and 1 de novo caecal resection) and 1 anterior resection (3% of all cases).

A total of 23 women (72%) had fertility sparing surgery, in whom 19 (83%) were performed laparoscopically.

There was a higher mean BMI in the laparoscopic group (30 Kg/m²) when compared with the laparotomy group (26 Kg/m²). Only 1 out of the 11 in the laparotomy group had a BMI > 30.

Three major complications occurred in the laparotomy group, including 2 wound infections requiring surgical debridement and 1 return to theatre for a pelvic/wound abscess.

CONCLUSIONS: Obesity did not reduce the chances of successfully completing the surgery laparoscopically, whereas the addition of hysterectomy or bowel resection increased the risk of laparotomy.

Complications occurred in the group undergoing laparotomy and this group had the lower BMI when compared with the laparoscopy group.

Laparoscopic rectal shaving of the disease in the majority of cases is possible, with a subsequent very low anterior resection rate and low complication rates, particularly in the fertility sparing group, as reported in other published studies².

REFERENCES:

1. Association of Endometriosis with body size and figure. Hediger ML, Hartnett HJ, Louis GM. *Fertil Steril* 2005 Nov; 84 (5): 1366-74
2. Complications, Pregnancy and Recurrence in a Prospective Series of 500 patients operated on by the shaving technique for deep rectovaginal endometriotic nodules. Donnez J, Squifflet J. *Hum Reprod* 2010;25(8): 1949-1958

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Free Communications 2 - Thursday 7 March

SESSION 3 - FREE COMMUNICATIONS II /
1330-1340

Pregnancy following laparoscopic radical trachelectomy

Yao S-E, Lee S, Tan J

This video presentation will demonstrate a novel laparoscopic approach to early stage cervical cancer in a 31 year-old nulliparous woman.

Following diagnosis of cervical SCC on cone biopsy with lymphovascular space invasion and with the strong wish for fertility preservation decision was made to proceed with a laparoscopic radical trachelectomy and pelvic lymphadenectomy.

The procedure was uncomplicated with an operating time of 140 minutes. LB was discharged 2 days after surgery.

Pathological examination revealed no residual malignancy in the trachelectomy specimen and lymph nodes were negative for malignancy.

Follow-up to date has been relatively unremarkable with minor vaginal spotting from ectopic endometrial tissue noted 4 months post-operatively requiring diathermy and negative colposcopic examination at 6 and 12 months. The patient achieved pregnancy spontaneously and is 18 weeks pregnant at time of the writing of this abstract.

The procedure was recorded in high definition video and we present our surgical techniques and invite discussion about the approach and techniques used.

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SESSION 3 - FREE COMMUNICATIONS
SESSION II / 1340-1350

Clinical analysis of 17 cases undergoing laparoscopic pelvic lymphadenectomy for gynecology malignant tumor

Xu H, Zhang B

OBJECTIVE: To summarize the experience of lymphadenectomy under laparoscopic for Gynecology malignant tumor, for the practical price takes, exploration, advantages and points for attention.

METHODS: Retrospectively analyze the 17 cases that received laparoscopic pelvic lymphadenectomy to pelvic malignancies after follow-up serves.

RESULTS: All the 17 cases were successfully performed by laparoscopic pelvic lymphadenectomy with no transferred to opening appendectomy. Blood loss in operation was (200-510) ml with the mean loss of 310ml. The median

number of harvested lymph nodes was 18(range15-31). Postoperative pelvic drainage tubes keep 4-7 days, average 5 days. Only a case of 17 cases happened lymphocyst with a follow up of 3 moths.

CONCLUSIONS: Lymphadenectomy under laparoscopy has clear vision, no more bleeding, keeping postoperative pelvic drainage tube retention time shorter, less lymphocyst formation, it is advantage of microtrauma laparoscopic in the area of gynecology.

KEY WORDS: Laparoscope; Pelvic lymphadenectomy; Malignant tumor

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SESSION 3 - FREE COMMUNICATIONS II /
1350-1400

Laparoscopic excision of full-thickness bladder endometriotic nodule, partial cystectomy and bilateral ureteric implantation in a young lady with long-standing obstructive nephropathy caused by severe pelvic endometriosis

Choi S, Aslan P, Cario G, Rosen D, Reyftmann L, De Rosnay P, Chou D

This is a video presentation of laparoscopic bladder endometriotic nodule excision, partial cystectomy and bilateral ureteric implantation in a young lady with long-standing obstructive nephropathy caused by severe pelvic endometriosis.

This 27-year-old lady presented to us with recurrent severe dysmenorrhea. Ultrasound and CT scans showed right hydroureteronephrosis and a shrunken right kidney, secondary to obstruction by a 4cm bladder mass at the right vesicoureteric junction. Cystoscopic examination showed a large exophytic bladder endometriotic nodule in the midline, just above the trigone and in close proximity to the ureteric orifices. The right ureteric orifice was obstructed and dragged over to left side with distortion from scarring. The left ureter was still functional but its orifice was encased in endometriosis. A diagnostic laparoscopy confirmed the presence of right hydroureter, and a bladder nodule that drew in and down the round ligaments and fallopian tubes from both sides. Preoperative creatinine level suggested borderline renal function.

In liaison with urologist, bilateral ureteric stents were firstly inserted cystoscopically. The laparoscopic procedures then started with right ureterolysis. Next, the bladder nodule was freed from the lower body of uterus, cervix and vagina. The bladder peritoneum and paravesical fat were stripped from the underlying bladder muscularis. This was followed by partial cystectomy under cystoscopy guidance. The disease free margin was outlined with laparoscopic monopolar diathermy under cystoscopic control. After that, the right

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ureter was divided at approximately 1.5cm proximal from its bladder insertion, so that its distal end, which was encased with fibrotic disease, was removed together with the bladder wall. Left ureteric implantation was also decided in view of significant resistance noted upon left ureteric stent insertion, as well as the close proximity between the left ureteric orifice and bladder excision margin. Bilateral ureteric implantation was performed through small lateral cystotomy in a tension-free manner. Meanwhile, the right ureter was lateralized and re-implanted away from the cervix and vagina in order to protect it from potential recurrent disease at these areas. Finally, the bladder was closed under no tension after being adequately mobilized from the cave of Retzius. Ureteric stent patency and bladder integrity were confirmed with cystoscopy at the end of the procedure.

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SESSION 3 - FREE COMMUNICATIONS II / 1410-1420

Laparoscopic removal and repair of caesarean scar ectopic pregnancy

Titiz, H

Caesarean scar pregnancy (CSP) is a form of ectopic pregnancy implanted within a fibrous tissue surrounding the previous caesarean section scar. It is one of the rare form of ectopic pregnancy (1:1800 prevalence in the early pregnancy assessment unit)¹. Its natural history, exact cause and mechanism is not well known. CSP may present from as early as 5–6 weeks to as late as 16 weeks. It may present with vaginal bleeding (39%), pain (24%). Also it can be an incidental finding in an asymptomatic woman (37%)².

Diagnosis is usually made with transvaginal ultrasound and color flow Doppler. The following are diagnostic criteria:

1. Empty uterine cavity
2. Gestational sac located anteriorly at the level of the internal os covering the visible or presumed site of the previous lower uterine segment Caesarean section scar
3. Evidence of functional trophoblastic/placental circulation on Doppler examination
4. Negative 'sliding organs sign'¹.

Early diagnosis can offer treatment options of avoiding uterine rupture and haemorrhage, thus preserving the uterus and future fertility. A delay in diagnosis and/or treatment can lead to uterine rupture, major haemorrhage, hysterectomy and serious maternal morbidity and mortality². No universal treatment guidelines for the management of CSP have been published. Expectant management should not be recommended due to poor prognosis³. Medical treatment options include systemic methotrexate and local embryocides e.g. methotrexate, potassium chloride.

Surgical treatment options includes hysteroscopy, laparoscopy, laparotomy (hysterotomy, hysterectomy), transvaginal removal, uterine artery embolization. This is a video demonstration of laparoscopic technique to remove and repair the Caesarean scar ectopic (early) pregnancy.

REFERENCES:

1. Jurcovic D, Hillaby K, Woelfer B et al, First-trimester diagnosis and management of pregnancies implanted into the lower uterine segment Caesarean section scar. *Ultrasound Obstet Gynecol* 2003; 21: 220–227
2. Ash A, Smith A, Maxwell D Caesarean scar pregnancy. *British Journal Obstetrics and Gynaecology* 2007;114:253–263
3. Litwicka K and Greco E Caesarean scar pregnancy: a review of management options. *Current Opinion in Obstetrics and Gynecology* 2011, 23:415–421

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SESSION 3 - FREE COMMUNICATIONS II / 1420-1430

The association between Pouch of Douglas obliteration and surgical findings 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 the presence of pouch of Douglas (POD) obliteration and surgical findings at laparoscopy in women with endometriosis.

METHODS: Multi-centre prospective observational study undertaken from January 2009 to November 2011. This study included women with symptoms of chronic pelvic pain +/- history of endometriosis, who were planned for laparoscopic endometriosis surgery. The following surgical features were recorded at the time of laparoscopy: uterine version (i.e. anteversion/retroversion), ovarian mobility, ovarian cyst, deep infiltrating endometriotic (DIE) nodules affecting the anterior rectum, rectosigmoid colon, rectovaginal septum, vagina and/or uterosacral ligaments. The association between surgical findings and the finding of POD obliteration at laparoscopy was then analyzed.

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, 30/100 (30%) women had an obliterated POD. The association between surgical findings and POD obliteration at laparoscopy was significant for the following features: uterine retroversion ($p=0.004$), bilateral ovarian fixation ($p<0.001$), bilateral ovarian endometrioma ($p=0.02$), and DIE nodules involving the anterior rectum, rectosigmoid colon, vagina and rectovaginal septum ($p<0.001$, $p<0.001$, 0.003 and 0.03, respectively). Bowel endometriosis was present in 19/30 (63.3%) women with POD obliteration, and skip lesions in the rectum and/or rectosigmoid were present in 4/19 (21%) of these women. 17/30 (56.7%) women with POD obliteration underwent



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bowel surgery and the need for bowel surgery was significantly associated with POD obliteration ($p < 0.01$).

CONCLUSION: This study helps to define the surgical findings that may be encountered with POD obliteration associated with endometriosis at laparoscopy. The presence of uterine retroversion, endometriomata, and DIE involving the rectosigmoid colon, anterior rectum, vagina and rectovaginal septum were all significantly associated with POD obliteration, as was the need for bowel surgery. 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 3 - FREE COMMUNICATIONS II /
1430-1440

Evaluation of Code Critical Caesarean Sections at Westmead Hospital

Kapurubandara S, Tse T, Anpalagan A, McGee T

INTRODUCTION: A code critical caesarean section is a rapid response system developed to facilitate the performance of an urgent caesarean section in situations that threaten maternal or fetal wellbeing.

AIM: This clinical audit examined the code critical caesarean sections in a 24 month period at a tertiary referral center. The aim was to investigate the indications and appropriateness of code criticals called, the decision to delivery time, the type of anaesthesia used and the maternal and fetal outcomes. Interim results were presented after 6 months at a multidisciplinary meeting where guidelines were developed for calling the code critical and an evaluation of the mode of anaesthesia was performed.

RESULTS: 233 code critical caesarean sections were conducted in the audit period, of which 169 (72%) cases met criteria for an appropriate code critical. The most common indications were non-reassuring CTG (34%) and fetal scalp lactate >4.9 mmol/L (22%). 150 (64%) cases were performed under general anaesthetic with 73% resulting in maternal complications. 136 (56%) neonates returned to the ward and 63 (26%) required admission to neonatal ICU with majority delivered under general anaesthetics.

Despite these admissions, there was no significant difference between general and regional anaesthesia when examining lactate, arterial pH, base excess and Apgars at 5 minutes as markers of neonatal outcome. The overall decision to delivery time was 19.7 minutes with a difference of 3 minutes between general anaesthetic (18.3mins) and regional anaesthetics (21.7mins).

CONCLUSION: This clinical audit confirmed that a decision to delivery time of less than thirty minutes, a widely accepted audit standard¹, is achievable in a tertiary level hospital with either general or regional anaesthesia. The neonatal outcomes between each anaesthetic were insignificant; however maternal morbidity was significantly increased with general anaesthesia. The implementation of guidelines at 6 months led to a significant decrease of inappropriate code critical caesarean sections, likely secondary to increased awareness of criteria. There was also a decrease in rates of code critical caesareans performed under general anaesthesia post presentation of interim results. This decrease in inappropriate calls potentially reduces inappropriate caesareans and exposure to general anaesthetics.

REFERENCE:

1. NHS.Caesarean Section Clinical Guidelines. NHS National Institute for Health and Clinical Excellence, 2004. <http://www.nice.org.uk/nicemedia/pdf/CG013NICEguideline.pdf>

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SESSION 3 - FREE COMMUNICATIONS II /
1440-1450

Can we develop a model to predict Pouch of Douglas obliteration in women with suspected endometriosis?

Reid S, Lu C, Casikar I, Condous G

OBJECTIVES: The aim was to develop a preliminary model to predict pouch of Douglas (POD) obliteration in women with suspected endometriosis who are scheduled for laparoscopic surgery.

METHODS: Multi-centre prospective observational study undertaken from January 2009 to November 2011. This study included women with symptoms of chronic pelvic pain +/- history of endometriosis, who were planned for laparoscopic endometriosis surgery. All women underwent a standardized history and detailed transvaginal ultrasound (TVS), including assessment of the POD for obliteration using the TVS 'sliding sign', prior to laparoscopy. More than 50 historical, clinical and TVS end points were recorded for analysis. Variables for the development of the preliminary model were determined using stepwise logistic regression analysis.

RESULTS: 100 consecutive women with a history of chronic pelvic pain underwent TVS and laparoscopy for suspected endometriosis. POD obliteration was confirmed in 30/100 (30%) of women at laparoscopy. Two models for the prediction of POD obliteration at laparoscopy

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were constructed based on the following variables: Model 1 (M1): the presence of an endometriotic nodule, right ovary fixation, and POD obliteration (predicted using the 'sliding sign' technique) and Model 2 (M2): the presence of an endometriotic nodule, right ovary fixation and bowel infiltration. The predictive ability of the preliminary models (with 95% confidence intervals) gave the following results for M1 vs. M2, respectively: area under the curve (AUC) = 0.97 vs. 0.97, accuracy = 96% vs. 95%, sensitivity = 97% vs. 97%, specificity = 93% vs. 90%, positive predictive value = 97% vs. 96%, negative predictive value = 93% vs. 93%, positive likelihood ratio = 14.6 vs. 9.7, and negative likelihood ratio 0.03 vs. 0.03. When the ultrasound finding of "POD obliteration" was used as a single variable for the prediction of POD obliteration at surgery, the AUC was 0.90, and was significantly different from the AUC for M1 ($p = 0.02$) and M2 ($p = 0.04$).

CONCLUSIONS: We have developed two new models to predict the likelihood of POD obliteration in women with chronic pelvic pain who are scheduled to undergo endometriosis surgery. Both of these models outperformed the TVS "sliding sign" alone as a predictor of POD obliteration. We aim to test these models prospectively to evaluate their performance in the pre-operative prediction of POD obliteration.

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SESSION 3 - FREE COMMUNICATIONS II / 1450-1500

A retrospective analysis looking at case-mix and complications in an established tertiary-level centre *de Rosnay P, Cario G, Rosen D, Chou D, Cooper M, Reid G, Reyftmann L, Choi S*

We present cumulative data covering the full spectrum of benign endo-gynaecological surgery at the Sydney Women's Endosurgery Centre (SWEC).

This tertiary-level unit comprises a team of advanced laparoscopic surgeons, working at a number of different centres, operating on complex cases with significant risk of intra- and postoperative complications. These include laparoscopic hysterectomy, myomectomy, pelvic floor repair, resection of endometriosis as well as a range of hysteroscopic interventions.

Robotic surgery has recently been introduced at SWEC and will form an integral part of our annual audit.

Patient outcomes including 'Quality of Life' as well as surgery-related morbidity are constantly being evaluated with the view to improving standards of care.

This annual review provides valuable insight into our current practise but also enables us to use the cumulative data to look at how our caseload and complication rates have evolved over the years.





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SESSION 7 - FREE COMMUNICATIONS CHAIRMEN'S CHOICE / 1300-1310

The use of a multimedia module to aid the informed consent process for gynaecological laparoscopy for pelvic pain. A randomised control trial

Ellett L, Villegas R, Jagasia N, Beischer A, Readman E, Maher P

Patients should be actively involved in decision making about their health care. Information is a key issue and communication difficulties have been linked to both patient anxiety and medico-legal sequelae. Multimedia modules claim to improve the informed consent process by holding a patient's interest longer and aiding their understanding. Our group was involved in the development of a 15 minute multimedia module which explains the indications, benefits and complications associated with operative laparoscopy.

OBJECTIVE: To examine whether watching a multimedia module will improve patient understanding about their operation and what role this might play on patient anxiety levels.

DESIGN: Randomised control trial (Canadian task Force I) in a tertiary public gynaecology unit and Epworth private hospital.

METHODS: 48 patients booked for operative laparoscopy for pelvic pain were approached. 41 agreed to participate. All patients had routine informed consent with their surgeon, who was blinded to the group the patient was assigned. The patients were then randomized to watch the multimedia module (intervention group) or not (control group). All patients then completed a knowledge questionnaire, the Spielberger short form STAI (state trait anxiety inventory). 6 weeks after recruitment patients completed the knowledge questionnaire again to look at retention of the information and the STAI.

RESULTS: The intervention group had improved knowledge scores. Mean score in the control arm 7.9 (SD 2.63) vs 11.3 (SD 1.79) $p < 0.001$ (max score 14) This did not translate into improved knowledge 6 weeks later. Control vs intervention group: mean score 7.43 (SD 1.74) vs 8.55 (SD 2.12). This result was not statistically significant $p=0.11$ Anxiety rates were not higher in the intervention group. Overall patients found the multimedia module very acceptable with 80% in the intervention group stating they would prefer this sort of consent in the future. 57% of the control group stated that in the future they would prefer to watch a multimedia module as well as usual informed consent with their doctor.

CONCLUSION: Using a multimedia module is effective at improving patient understanding and knowledge about their operation. It does not appear to cause increased anxiety. This study demonstrated that patient knowledge deteriorates over time. If the time between informed consent and operation date is very drawn out it would be prudent for the surgeon to go over important information again.

REFERENCES:

1. Mason V, McEwan A, Walker D, Barrett S, James D The use of video information in obtaining consent for female sterilisation; a randomised study BJOG 2003; 110: 1062-1071
2. Gogos AJ, Clark RB, Bismark MM, Gruen RL, Studdert DM. When informed consent goes poorly: a descriptive study of medical negligence claims and patient complaints Med J Aust 2011; 195 (6): 340-344
3. Cornoiu A, Beischer A, Donnan L, Graves S, DeSteiger R, Multimedia patient education to assist the informed consent process for knee arthroscopy. ANZJSurg 2011;81 176-180

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SESSION 7 - FREE COMMUNICATIONS CHAIRMEN'S CHOICE / 1310-1320

Laparoscopic repair of caesarean scar defect and pregnancy outcome

Kong KY, Angstetra D, Reid G

OBJECTIVE: To evaluate the technique of laparoscopic repair of caesarean scar defect and post-operative pregnancy outcome.

METHODS /STUDY DESIGN: A total of eight patients underwent laparoscopic repair of caesarean scar defect in Sydney suburban hospitals from 2008 to 2011. Medical records were reviewed to identify patient characteristics including age, parity, number and indication of previous caesarean sections, background medical and surgical history. Pre-operative ultrasound and MRI findings were reviewed. Intra-operative surgical findings, technique and length of hospital stay were evaluated. Post-operative follow-up including time interval between caesarean scar repair and delivery, and pregnancy outcome were recorded.

RESULTS: The main presenting issues were IVF failure (2/8), ultrasound evidence of cesarean scar defect prior to embryo transfer (5/8) and visualisation of scar defect on follow up ultrasound post treatment of caesarean scar ectopic pregnancy (1/8). The baseline characteristics included a mean age of 38.4 years (35-43 years), and a mean parity of 1.5 deliveries (1-3 deliveries) and mean number of cesarean section of 1.4 cases (1-2 cases).

Intra-operatively, hysteroscopy was performed initially to ascertain the extent of defect. Bladder was mobilised and peritoneum over scar defect was excised. Scar defect was closed with a single layer interrupted vertical mattress using 0 or 1 PDS. 3 to 5 stitches were applied depending on the size of the defect. Prophylactic antibiotic was given. No intraoperative complication was recorded and length of stay was 0.2 days (0-1 days).

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All patients had post-operative ultrasound between 6 to 10 weeks, which show intact uterine wall with no evidence of scar defect and resolution of hydrometra. Six patients underwent IVF cycle with a mean of 2.17 cycles (1-3 cycles). There were 5 clinical pregnancy and 4 live births recorded. The time interval from repair of scar defect to delivery was 15 months (12-19 months). 1 patient was lost to follow-up.

CONCLUSION: Caesarean scar defect is an under-recognized contributing factor to secondary infertility¹. Repair of caesarean scar defect laparoscopically may improve pregnancy outcome in these patients². Laparoscopic repair of caesarean scar defect has the advantage of being minimally invasive while allowing optimal view during dissection of vesico-vaginal space and restoring of integrity of the uterine wall, without major morbidity to the patients³.

REFERENCES:

1. Gubbini G, Centini G, Nascetti D, Marra E, Moncini I, Bruni L, Petraglia F, Florio P. Surgical hysteroscopic treatment of cesarean-induced isthmocele in restoring fertility: prospective study. *J Minim Invasive Gynecol.* 2011 Mar-Apr;18(2):234-7
2. Donnez O, Jadoul P, Squifflet J, Donnez J. Laparoscopic repair of wide and deep uterine scar dehiscence after cesarean section. *Fertil Steril.* 2008 Apr;89(4):974-80. Epub 2007 Jul 10
3. Klemm P, Koehler C, Mangler M, Schneider U, Schneider A. Laparoscopic and vaginal repair of uterine scar dehiscence following cesarean section as detected by ultrasound. *J Perinat Med.* 2005;33(4):324-31

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SESSION 7 - FREE COMMUNICATIONS CHAIRMEN'S CHOICE / 1320-1330

Establishment of robotic surgical programme for benign gynaecology in an advanced laparoscopic centre – proctorship and beyond

Choi S, Rosen D, Chou D, Reyftmann L, De Rosnay P, Greg Cario G

BACKGROUND: In this oral presentation, we share our experience in establishing a robotic surgery programme dedicated to treatment of benign gynaecological conditions in an advanced laparoscopic centre. Our early data, including those in the proctorship period, are discussed.

METHODS: Prospective data were collected from July 2012 to January 2013 for all women undergoing robot-assisted procedures performed by the three advanced laparoscopic surgeons within Sydney Women's Endosurgery Centre (SWEC). Patient demographic, intraoperative, perioperative and postoperative data were collected.

RESULTS: Twenty robot-assisted cases were performed within SWEC. Seven cases of total robot-assisted hysterectomy were

performed during proctorship. Only one patient required conversion to conventional laparoscopic procedure. No major complications were recorded. The mean hospital stay was 1.3 +/- 0.2 days. A trend of reduction in docking time, surgeon console time, total operation time and anaesthetic time was observed with gaining experience and technical refinement.

CONCLUSION: Our experience with robotic-assisted hysterectomy appears promising even during the initial learning curve. The technique, docking time and operative time gradually improved with experience.

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SESSION 7 - FREE COMMUNICATIONS CHAIRMEN'S CHOICE / 1330-1340

Laparoscopic myomectomy of an 1.8kg pedunculated fibroid causing uterine torsion *Cebola M, Cario G, Rosen D, Reyftmann L, De Rosnay P, Choi S, D*

This is a surgical video presentation of a laparoscopic myomectomy of a 17cm pedunculated fibroid in a 47 years old nulliparous lady. The patient primarily had pressure symptoms including urinary frequency, bloating and pelvic discomfort. Preoperative MRI confirmed pedunculated nature of the fibroid. Intraoperatively, the uterus was noted to be in 270 deg torsion in clockwise direction, such that the left cornua was located posteriorly. Left adnexal vasculatures were congested but blood supply to the fibroid was unaffected. Following detorsion of the uterus and injection of dilute Vasopressin, the thick pedicle was suture ligated with Roeder, extracorporeal slip knot. The long arm of the sutures were not cut so that the knot could be easily tightened further with knot pusher as they inevitable loosen as one works towards dividing the fibroid from its pedicle. The pedicle was further coagulated and sutured for additional haemostatic measure. The fibroid was extracted with a 15mm electrical morcellator.

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SESSION 7 - FREE COMMUNICATIONS- CHAIRMEN'S CHOICE / 1340-1350

To excise or ablate endometriosis? A prospective randomized double blinded trial after 5 years follow-up

Healey M, Kaur H, Cheng C

BACKGROUND: At present, gynaecologists performing laparoscopic treatment of endometriosis choose to excise or to ablate lesions. The current medical literature does not provide evidence to support one method over the other (1).



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This study aims to compare the reduction of pain following laparoscopy after ablation or excision of endometriosis. The published analysis at 12 months follow-up did not show any significant overall pain reduction between the two groups (2). Here is a further analysis of the long term five year follow up of these women.

METHODS: This study was a prospective randomized double blind study conducted in the endometriosis and pelvic pain clinic at Royal Women's Hospital Melbourne. Recruitment occurred from July 2001 to September 2007 and follow up from July 2001 to September 2012. Subjects were women of reproductive age presenting with pelvic pain and visually proven endometriosis on laparoscopy that provided informed consent, spoke English, over 18 years of age and were not on hormonal therapy. Preoperatively, subjects completed a questionnaire rating their various pain symptoms using Visual Analogue Scales (VASs). Intra-operatively, subjects were randomly assigned to excision or ablation surgical treatment after American Fertility Society system scoring and visual exclusion of obvious endometriosis involving muscle levels of bowel, bladder or ureter. Follow up questionnaires at 3 monthly intervals in the first year and 6 monthly intervals for the following 4 years documented pain levels. Analysis of data was performed using SPSS version 11.5. The study was approved by the Research and Ethics Committees of the Royal Women's Hospital, Melbourne.

RESULTS: A total of 335 subjects were recruited and underwent laparoscopy. Of these, 178 subjects were assigned randomly to ablation (N=89) and excision (N=89). Of the 157 subjects not randomized, 101 did not have endometriosis, 20 had endometriosis involving rectum, bladder or ureter muscle and 36 had possible endometriosis confirmed on histology. Median revised AFS scores (95% confidence interval) were 10 for the excision group and 7 for the ablation group. Response rates for questionnaires at 6 months, 12 months and 5 years post laparoscopy were 80%, 71% and 46% respectively.

There was a reduction in all pain scores over the five year follow up in both treatment groups but there remained no significant difference in reduction of overall pain between the excision and the ablation groups. There was a trend towards a higher reduction in sex pain in the excision group which became significant at 3 years 6 months ($p=0.015$); 4 years 6 months ($p=0.047$) and at 5 years ($p=0.031$).

There was significantly more medical treatment used within the ablation group over five years ($p<0.01$) but no difference in further surgery rates between the two groups.

CONCLUSION: This study has shown that excision of endometriosis provides an advantage over ablation when treating sex pain. This finding needs to be independently confirmed with a second study, preferably with a larger sample size or lower rate of loss to follow-up.

REFERENCES:

1. Yeung PP Jr, Shwayder J, Pasic RP. Laparoscopic management of endometriosis: comprehensive review of the best evidence. *J Minim Invasive Gynaecol* 2009;16:269-81
2. Healey M, Ang WC, Cheng C. Surgical treatment of endometriosis: a prospective randomized double-blinded trial comparing excision and ablation. *Fertil Steril* 2010;94(7): 2536-2540

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SESSION 7 - FREE COMMUNICATIONS CHAIRMEN'S CHOICE / 1350-1400

The role of laparoscopy in the surgical management of a 4.2kg uterine fibroid – A video presentation

de Rosnay P, Cario G, Rosen D, Cooper M, Reid G, Reyftmann L, Choi S, Chou D

For the laparoscopic surgeon, the technical challenges when faced with uterine fibroid(s) occupying most of the abdomino-pelvic cavity are substantial. First and foremost is patient safety. Therefore, consideration should always be given to more conservative strategies prior to embarking on surgical management with its inherent risks.

However, when the decision for myomectomy is made, issues such as access and port placement as well as prevention of bleeding are of paramount importance. In addition, when the fibroid mass invades the retroperitoneum causing disruption to viscera such as the bladder, ureters and bowel, the potential for complications rises significantly. Should the laparoscopic route be successful, one also needs to consider removal of the fibroid, which in itself can be a tricky and lengthy process.

Surgical options include the laparoscopic route alone, laparotomy alone or a combination of the two, i.e. laparoscopic assisted minilaparotomy myomectomy.

This video demonstrates the benefits as well as the challenges of laparoscopic surgery when excising massive uterine fibroid(s).

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SESSION 7 - FREE COMMUNICATIONS CHAIRMEN'S CHOICE / 1400-1410

The value of MRI in the investigation of pudendal nerve entrapment

Chow JSW, Sachinwalla T, Jarvis SK, Vancaillie TG

INTRODUCTION & OBJECTIVES: Magnetic resonance imaging of the sacral spine and pudendal nerves has been part of the investigations for perineal and pelvic pain at our unit since 2008. This retrospective study examines the correlation of MRI findings of suspected pudendal nerve compression with outcomes of pudendal nerve blocks.

MATERIALS & METHODS: The radiology protocol went through a number of iterations as expertise was acquired. From January 2012 MRI was performed on a Philips 3 Tesla Achieva System using a 16 channel Torso coil. Anatomical detail was obtained from an Axial PD weighted

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3mm sequence and a volume THRIVE T1 weighted sequence acquired in the coronal plane. Supplementary coronal T2 fat suppressed and sagittal T2 weighted images were also obtained.

MRI studies were evaluated for dimensions of the pudendal nerve canal above and below the level of the ischial spine. Positive studies demonstrated narrowing of the interligamentous space less than 3mm when superior to the ischial spine and focal reduction in perineural fat when below the ischial spine. Positive studies distal to Alcock's canal demonstrated focal changes consistent with scarring around distal pudendal nerve branches.

Patients also underwent a pudendal nerve block as a diagnostic test for pudendal nerve entrapment according to the criteria of Nantes. The block was performed under image intensifier control with Urografin 30 as contrast medium. A standard amount of 5cc of Chirocaine 0.5% was injected. A positive block is defined as the occurrence of numbness in the distribution of the pudendal nerve and resolution of the perineal pain. A block is considered negative if the pain is not or only partly resolved.

RESULTS: 124 patients underwent an MRI between January and November 2012 and 59 patients underwent a pudendal nerve block with the above protocols. 64.4% patients had a positive block. Of the patients with a positive block, 68.4% had MRI indicating possible pudendal nerve compression. Of the patients with a negative block, 47.6% had MRI demonstrating possible pudendal nerve compression.

CONCLUSION: Patients with a positive pudendal nerve block did not have findings on MRI different from patients with a negative pudendal nerve block.

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SESSION 7 - FREE COMMUNICATIONS CHAIRMEN'S CHOICE / 1410-1420

Combined levonorgestrel intrauterine system and etonogestrel subdermal implant for refractory endometriosis-associated pelvic pain: An effective new dual therapy

Marren AJ, Fraser IS, Al-Jefout MI, Pardey A, Pardey J, Ng CHM

BACKGROUND: Endometriosis is an oestrogen-dependant condition where endometrial-like tissue is present outside the endometrial cavity. Endometriosis usually presents as chronic pelvic pain and/or infertility. Its true prevalence is uncertain. However, endometriosis is found in 50% of women undergoing laparoscopy for infertility, 47% for pelvic pain (Shah and Missmer, 2011), and 18% in asymptomatic women (McLeod and Retzlaff, 2010). Conservative surgery is often combined with first-line medical management, which involves non-steroidal anti-inflammatory drugs (NSAIDs), progestogens, and/or the combined oral contraceptive pill (COCP). Where these fail to adequately control the patient's

symptoms, advanced medical treatment and/or conservative/non-conservative surgical treatment are usually offered. This study details the very successful simultaneous use of a levonorgestrel-releasing intrauterine system (LNG-IUS) combined with an etonogestrel subdermal implant (ESI) in women with debilitating and refractory endometriosis.

MATERIALS AND METHODS: Ethics approval was obtained from the appropriate institutions. Medical records (n = 40) of two clinicians who have utilised both slow-releasing progestogen-only systems were searched. Data were collected and analysed. Data items included: age at first review, family history of endometriosis, pre-treatment symptoms and duration, prior therapy, method of diagnosis, duration of dual treatment, post-treatment symptomatology, and the presence of side effects.

RESULTS: 40 women used the dual therapy, following failure of various first-line and/or advanced medical therapies (i.e. COCP [n = 30], progestogens [n = 14], NSAIDs [n = 12], GnRH analogues [n = 12] and Danazol [n = 4]) and conservative surgery (n = 31). Overall, 60% (n = 24) of these women experienced dramatic or marked improvement in all symptoms, with minimal side effects (3 needing longer follow up). The responses were particularly favourable in a difficult group of adolescents (age 20 or less) with familial endometriosis (n = 12), of whom 5 had 'dramatic' response, 5 markedly improved and 2 borderline. Of the 40 women, either the LNG-IUS or ESI or both were removed in 7 women, as a result of some persistent pain or side-effects and in one of these patients, a new primary diagnosis of pelvic floor myalgia (for Botox).

CONCLUSION: Dual therapy with LNG-IUS and ESI is an effective new treatment option in women with persistent endometriosis-associated symptoms who have failed multiple advanced medical therapies and/or conservative surgery. A randomised controlled trial comparing the dual therapy versus LNG-IUS alone is warranted to determine broader application of this novel therapy in management of endometriosis symptoms.

REFERENCES:

1. McLeod BS, Retzlaff MG. Epidemiology of endometriosis: An assessment of risk factors. *Clinical Obstetrics and Gynecology*. 2010; 2:389-396
2. Shah DK, Missmer SA. Scientific investigation of endometriosis among adolescents. *Journal of Pediatric and Adolescent Gynecology*. 2011; 5:S18-S19

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SESSION 7 - FREE COMMUNICATIONS
CHAIRMEN'S CHOICE / 1420-1430

The effect of patient body mass index on surgical difficulty in gynaecological laparoscopy. A prospective observational study
McIlwaine K, Ellett L, Villegas R, Cameron M, Jagasia N, Readman E, Maher P

BACKGROUND: In the developing world rates of obesity are increasing at an alarming rate. Open surgery is associated with increased morbidity and mortality in the obese population. Obese women are the patients most likely to benefit from laparoscopic surgery, because such surgery is associated with less postoperative pain, earlier ambulation, shorter hospital stays and earlier recovery. However, there is limited data available to aid the gynaecologist with regards to the effect of body mass index on laparoscopic surgical difficulty.

OBJECTIVE: This prospective trial looked at surgical outcomes and the impact of body mass index.

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

SETTING: tertiary referral hospital in Melbourne, Australia.

METHODS: 307 women undergoing laparoscopic gynaecological surgery for benign pathology were recruited. Preoperative measurements included: weight, height, waist and hip circumference and intended outcomes of surgery. Intra-operative variables included: ease of identification of anatomical landmarks (ureters + inferior epigastric arteries), entry technique and number of attempts, conversion to laparotomy, difficulty of surgery and any complications encountered. At the 6 week review post-operative complications were recorded.

RESULTS: From January 2009 until October 2012 316 women scheduled to undergo gynaecological laparoscopic surgery were approached and invited to participate. 307 women were included in the study. 143 women were of normal BMI, 91 women overweight (BMI 25 – 29.9) 45 women obese (BMI 30 – 34.9) 28 women morbidly obese (BMI ≥35). As BMI increased the ease of identification of important anatomical landmarks significantly decreased. Although there were perceived increased number of entry attempts and complication rates these figures did not reach statistical significance. The rate of conversion to laparotomy was overall quite small (2.9%) Conversion rates in each BMI group were as follows: BMI <25 (2/143) 1.39%, BMI 25-29.9 (5/91) 5.49%, BMI ≥ 30 (2/73) 2.74%, BMI ≥ 35 (0/28) 0%. There was no significant increase in conversion to laparotomy with increasing BMI. Likewise 94.46% of operations were completed as planned and BMI did not appear to play a significant role.

CONCLUSION: Gynaecological laparoscopy can be safely offered to the obese and morbidly obese patients. In this study obesity was not associated with a statistically significant increase in complication rates or failure to complete the surgery as planned. The surgeon needs to be aware that anatomical landmarks are likely to be obscured and sound knowledge of anatomy is crucial to avoid complications in this patient population.

REFERENCES:

1. McIlwaine K, Cameon M, Readman E, Manwarring J, Maher P. The effect of patient body mass index on surgical difficulty in laparoscopic surgery. *Gynecol Surg* 2011 8:145-149
2. Camanni M, Bonino L, Delpiano E, Migliaretti G, Berchiolla , Deltetto F Laparoscopy and Body mass index: feasibility and outcome in obese patients treated for gynecologic diseases
3. Australian Bureau of Statistics. Overweight and Obesity in Adults in Australia: A snapshot National Health Survey of Results 2008 – 2009 viewed 9th January 2013

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SESSION 7 - FREE COMMUNICATIONS
CHAIRMEN'S CHOICE / 1430-1440

Laparoscopy and gynaecological diaphragmatic disease

Yao S-E, Lee S, Tan J

This video presentation highlights the boundaries being pushed by minimally invasive approaches and the potential for a laparoscopic approach to gynaecological pathologies affecting the diaphragm such as endometriosis and Fitz-Hugh-Curtis syndrome.

This case of a 53 year-old previously hysterectomised woman who underwent laparoscopic omentectomy, diaphragmatic stripping and removal of a liver nodule for an incidental finding of malignancy following bilateral salpingo-oophorectomy for a large right ovarian cyst.

At time of writing, the patient had completed her course of adjuvant chemotherapy for her stage 3C ovarian adenocarcinoma and has no radiological evidence of residual disease.

This procedure was record in high definition video and we invite further discussion about the approach to the techniques used.

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SESSION 7 - FREE COMMUNICATIONS
CHAIRMEN'S CHOICE / 1440-1450

Depot medroxyprogesterone acetate (DMPA) in the treatment of endometriosis

Vollenhoven B, Dennerstein G, Fernando S, Fraser I, Polyakov A, Vu P, Wark JD

This is an account of 141 consecutive women diagnosed with endometriosis and treated with DMPA injections between 1973 and 2011 in one gynaecological private practice. The data were collected prospectively and entered in a purpose-made database. Many individuals were treated over prolonged periods of time. Dosages were given according to recommended schedules for endometriosis, usually 150mg every 3 months.

The data have been analyzed with regard to duration and success of the treatment and side effects, including the effect on bone mineral density.

Pelvic pain was relieved with a high degree of success and limited side-effects (in line with published data). Bone mineral density measurements show no significant difference from a normal female population collected in the same city using the same hospital-based BMD practice.

It is concluded that DMPA is a safe and effective treatment that should be offered as an alternative long-term medical option to all women diagnosed with endometriosis who do not wish to conceive within 12 to 18 months. Published data on this option are very limited, but anecdotally it is used widely around the world for endometriosis.

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SESSION 7 - FREE COMMUNICATIONS
CHAIRMEN'S CHOICE / 1450-1500

Retrospective clinical audit reviewing the use of Magnetic Resonance guided Focused Ultrasound (MRgFUS) in the treatment of submucosal uterine fibroids at the Royal Women's Hospital Melbourne

Rajadevan N, Szabo R, Dobrotwir A, Ang WC

BACKGROUND: Uterine fibroids are hormonally dependent with a maximal incidence during the reproductive years and are reported to occur in 20-40% of reproductive aged women and are clinically apparent in approximately 12-25%. Symptoms attributable to uterine fibroids are generally classified into three categories: abnormal uterine bleeding, pelvic pressure and pain and reproductive dysfunction. A number of treatment alternative are available. However, given the tendency for women to start a family at an age where natural female fertility is in decline and the incidence

of fibroids is increasing, effective treatment options which relieve symptoms whilst also preserving fertility are becoming increasingly more important. MRgFUS provides one such treatment alternative.

AIM: To review all cases of submucosal uterine fibroids treated by MRgFUS at the Royal Women's Hospital Melbourne between 2009-2012 over the first 30 months of MRgFUS related experience. Specific outcomes assessed included treatment success as defined by a reduction in symptom severity score measured at 4 and 12 months post-treatment, fibroid volume shrinkage and features predictive of treatment failure.

METHODS: A retrospective clinical audit was undertaken of 62 women who underwent treatment with MRgFUS for at least one submucosal fibroid over the initial 30 month treatment period at the Royal Women's Hospital Melbourne. Patients were identified through a database maintained by the Radiology department and data regarding demographics, clinical characteristics and treatment outcomes was obtained through the clinical results database and individual patient hospital records.

RESULTS: Of the 62 patients identified, 39 (62.9%) of patients were successfully treated by MRgFUS with a decrease in symptom severity score at 4 months whilst at 12 months 32 (59.3%) of patients were considered to have been successfully treated. Ten patients (16.1%) required further intervention despite treatment with MRgFUS including either hysterectomy or open, laparoscopic or hysteroscopic myomectomy. Patients who failed MRgFUS treatment were more likely to be of a younger age (40.4 vs 42.7yrs), decreased parity (0.6 vs 1.1) and with an increased overall uterine and/or fibroid volume (mean uterine volume 520.8 vs 490.8mL). Overall reduction in treated fibroid volume also varied between those who were treated successfully in comparison to those who failed treatment.

CONCLUSION: In selected cases for the treatment of submucosal fibroids MRgFUS provides a safe and suitable treatment alternative. Whilst further studies are required to more fully determine long-term outcomes and optimal patient characteristics, the benefits of MRgFUS over other treatment modalities include its non-invasive nature, relatively low complication rate, quicker recovery and preservation of fertility.

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Submucous fibroids – a series of hysteroscopic morcellation

Nesbitt-Hawes EM, Sgroi J, Abbott JA

OBJECTIVE: To report surgical outcomes for women having submucous myomas treated with the Myosure™ hysteroscopic morcellator.

METHODS: A prospective, observational study was performed. Nineteen women who were scheduled for hysteroscopic resection of submucous myomas were identified as candidates to be treated with the Myosure device. Demographic and pre-operative data were obtained including ultrasound characteristics of the myomas. The morcellator was used according to the manufacturer's instructions, including continuous, electronic fluid monitoring. Intraoperative data were collected and analysed.

RESULTS: Between July and December 2012, there were 22 cases of myoma morcellation at the Royal Hospital for Women and Prince of Wales Private Hospital. There was agreement between the ultrasound and hysteroscopic assessment of the myoma in 9/22 (41%) cases. 10/22 (45%) were type 0, 10/22 (45%) were type 1 and 2/22 (9%) were type 2 myomas, with a mean diameter of 26mm (SD 12-39mm). The mean cutting time was 5 minutes and 3 seconds and the saline deficit 1222mL. The pathology was removed completely in 16/22 (73%) of the cases, with 2/22 (9%) requiring further treatment at the time of the first surgery and 3/22 (14%) requiring a second surgery. There were no intra-operative or post-operative complications.

CONCLUSIONS: The Myosure hysteroscopic morcellator is effective in the treatment of submucous myomas including up to 50mm diameter. Difficulties with the morcellator seemed to be associated with calcified myomas and may relate to the calibre of the device.

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FREE COMMUNICATIONS / DIGITAL COMMUNICATIONS SESSION

Thinking outside the box. Women's experience of living with endometriosis: a qualitative study

Moradi M, Parker M, Lopez V, Sneddon A, Phillips C, Ellwood D

OBJECTIVES: Endometriosis is a chronic disease defined as the presence of endometrial tissue outside the uterus and is characterised by period and pelvic pain for many women. However QoL research has suggested that the impact and

experience of living with endometriosis extends beyond the pelvis.¹ The aim of this study was to explore women's long term experiences of living with endometriosis, the impact of disease on all aspects of their lives and whether impact varies across age groups.

METHOD: A qualitative descriptive design with a phenomenological framework was used. Ten Semi-structured, in-depth, face to face focus groups were run for three age groups (16-24, 25-34, 35 plus years). A sample of 35 Australian women with a laparoscopic diagnosis of endometriosis was purposefully recruited, including 23 women from the Endometriosis Centre at The Canberra Hospital and 12 women who had not attended the Centre. Thematic analysis was used to analyze the data transcribed using NVivo 9 software.

RESULTS: 10 focus group discussions of 2-2.5 hours were conducted. The age of participants ranged from 17-53 years. Average delayed diagnosis was 8.1 years and women had experienced symptoms for a range of 2 to 40 years.

Common symptoms experienced were: period pain, dyspareunia, heavy bleeding, irregular bleeding, and infertility.

20 final themes emerged from data analysis; six themes with regard to experiences of living with endometriosis and fourteen themes with regard to the impact of endometriosis on women's lives. Most participants had experienced prolonged and severe pain, delayed diagnosis, various treatments, several surgeries and recurrence of disease.

The majority of women reported that endometriosis had a high impact on their life with the four most commonly highlighted areas for all age groups being marital/sexual relationship, social life, physical and psychological although order of priority varied. However some differences in the next most highlighted areas were noted, education in the young women (16-24 years), life opportunities and employment for the 25-34 year olds; and financial impact for the 35 plus age group.

CONCLUSION: Greater awareness of the negative impact of endometriosis highlights the importance health professionals play in best practice disease management that extends beyond the pelvis to reduce the negative impact of disease across the menstrual lifespan. For example, achieving a fulfilling sex life despite endometriosis may improve relationships and ensuring that young women with endometriosis are supported to complete their education may help maximize future employment and life opportunities.

REFERENCE:

1. Gao X. et al. Health-related quality of life burden of women with endometriosis: a literature review. *Current Medical Research and Opinion* 2006; 22(9): 1787- 1797

KEYWORDS: Endometriosis, qualitative research, quality of life, impact

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FREE COMMUNICATIONS / DIGITAL COMMUNICATIONS SESSION

Bladder and bowel dysfunction after excision of deep infiltrating endometriosis

Chow JSW, Cooper MJW, Korda A, Benness C, Krishnan S

BACKGROUND: Laparoscopic excision of endometriosis reduces pain and improves quality of life¹. Excision of deep infiltrating endometriosis (DIE) involving the uterosacral ligaments and rectovaginal septum may however cause injury to the pelvic autonomic supply and result in bladder and bowel dysfunction. Nerve sparing surgery for DIE has been proposed as a possible means of reducing bladder dysfunction postoperatively^{2,3}.

AIM: This study aims to compare outcomes in bladder and bowel function in women undergoing non-nerve sparing excision of DIE with women undergoing excision of endometriosis from other sites.

METHODS: A retrospective cohort study was performed comparing the two groups of women. Patients underwent surgery for severe endometriosis by two level 6 laparoscopic surgeons. Bladder and bowel function were evaluated by validated questionnaire. Primary outcomes measured were symptom scores for urinary voiding and stool evacuation. Secondary outcomes measured were urinary stress and urge incontinence, and a global score for urinary and bowel symptoms.

RESULTS: There was no difference in the primary outcomes of voiding dysfunction or stool evacuation scores between women undergoing non-nerve sparing excision of DIE with women undergoing excision of endometriosis from other sites.

CONCLUSION: Bladder and bowel dysfunction occurs after excision of deep infiltrating endometriosis. The role of nerve-sparing surgery for DIE requires ongoing study.

REFERENCES:

- Abbott J, Hawe J, Hunter D et al. Laparoscopic excision of endometriosis: a randomised, placebo-controlled trial. *Fertility & Sterility*. 82(4):878, 2004 Oct
- Kavallaris A, Mebes I, Evagelinos D et al. Follow-up of dysfunctional bladder and rectum after surgery of a deep infiltrating rectovaginal endometriosis. *Archives of Gynecology & Obstetrics*. 283(5):1021, 2011 May
- Cecaroni M, Clarizia R, Bruni F et al. Nerve-sparing laparoscopic eradication of deep endometriosis with segmental rectal and parametrial resection: the Negrar method. A single-center, prospective, clinical trial. *Surgical Endoscopy*. 26(7):2029, 2012 Jul

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FREE COMMUNICATIONS / DIGITAL COMMUNICATIONS SESSION

Case Report: Cervico-peritoneal fistula following hysteroscopic resection of caesarean scar ectopic pregnancy

Maley P, Law K, Bourke M, Abbott J

BACKGROUND: Caesarean scar ectopic pregnancy (CSP) is rare, with an estimated incidence of 1:1,800 to 1:2,216 pregnancies. With the increase in abdominal deliveries, more referrals to tertiary centres are being made for this complication. Management options include systemic or local delivery of methotrexate, hysteroscopic and laparoscopic surgery. This case reports the management of a cervico-peritoneal fistula, a complication after hysteroscopic resection of a CSP.

Case Description: A woman with a sonographic diagnosis of CSP underwent hysteroscopic resection of products with haemostasis by monopolar diathermy and Foley catheter

She had a representation one week later with a haematoma diagnosed and tracked by pelvic ultrasound. At 7 months the patient reports persistent daily watery vaginal loss. Radiological investigations and cystoscopy excludes urinary tract fistula, however hysteroscopy demonstrates a cervico-peritoneal fistula.

Laparoscopic resection of the fistulous tract is undertaken and the patient recovers well and at 6 week follow-up discharge has resolved. An intra-uterine, fundal pregnancy was achieved 9 months post fistula repair. With subsequent successful repeat caesarean delivery at term and no evidence of the tract at surgery.

Images of the sonographic diagnosis, hysteroscopic and laparoscopic management will be included in the DCS.

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Luteal phase defect and ectopic pregnancy

Miller B, Mclindon L, Beckmann M

Luteal phase deficiency, while commonly observed and managed in stimulated in-vitro fertilisation cycles, is a more contentious phenomenon in natural cycles. Difficulty arises in the definition and diagnosis of luteal phase deficiency¹. Jones first described luteal phase defect based on temperature criteria, urinary pregnanediol studies and histological appearance of the endometrium in 1949. Difficulties occur in the timing of the luteal phase from which an evaluation of its length and hormonal parameters can be made.

The time of ovulation and thereby the length of the luteal phase can reliably and reproducibly be determined by teaching women to identify their Peak Symptom Day of cervical mucus (the last day of any mucus discharge that is clear, stretchy, or lubricative). There is an abrupt and dramatic change in the characteristic fertile pattern of pre-ovulatory mucus that is due to the effects of progesterone post-ovulation. Correlation with ultrasound and hormonal evaluation indicates that the mucus observation occurs within 2 days of ovulation². Using such a fertility awareness method, the American Academy of Fertility Care Professionals has defined a luteal phase deficiency as a deficiency in the length of the luteal phase, or a deficiency of the hormones progesterone and oestradiol that occurs during the luteal phase.

Using such a definition, the Natural Fertility Services unit at the Mater Mothers' (Brisbane, Australia) has to date demonstrated that a luteal phase deficiency exists in 36% of infertile couples who presented for infertility treatment, and consented to be involved in its Pregnancy Achieving Trials (PATrial). A finding of interest, of 19 women who had previously experienced a miscarriage and an ectopic pregnancy, 75% (12 of 16) of those assessed met the criteria for a luteal phase deficiency.

Previous research has suggested this association between luteal phase deficiency and ectopic pregnancy in subfertile couples³. Could luteal phase deficiency, a hormonal disorder, be useful in the definition of ectopic pregnancy risk?

REFERENCES:

1. The Practice Committee of the American Society for Reproductive Medicine. The clinical relevance of luteal phase deficiency: a committee opinion. *Fertility and Sterility*. 1 November 2012 (volume 98 issue 5 Pages 1112-1117 DOI: 10.1016/j.fertnstert.2012.06.050)
2. Hilgers T. *The Medical and Surgical Practice of NaproTechnology*. PPVI Institute Press. 2004; pp196-203 and pp 425-452
3. Guillaume AJ, Benjamin F, Sicuranza B, Deutsch S, Spitzer M. Luteal phase defects and ectopic pregnancy. *Fertility and sterility*. Jan 1995;63(1):30-3

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FREE COMMUNICATIONS / DIGITAL COMMUNICATIONS SESSION

Subsequent management of unsuccessful Fulshi clip tubal occlusion.

Georgiou C

Laparoscopic tubal occlusion by the application of Fulshi clips to the fallopian tubes is a common gynaecological procedure performed throughout the world. It is usually considered straightforward with minimal laparoscopic difficulty in comparison to other forms of laparoscopic adnexal surgery.

As a method of contraception that is usually considered permanent, it does have a reported failure rate of approximately 1:200. The patient should be informed of this and in order to minimize this failure rate, a number of steps are suggested. These include; obtaining a comprehensive history particularly with respect to menstrual cycle and previous surgery, performing a urine pregnancy test on the day of the procedure and finally, avoidance of clip application if unprotected sexual intercourse has occurred during the luteal portion of the current menstrual cycle. However, despite these measures, a subsequent pregnancy may ensue.

This presentation describes TWO such cases of failed laparoscopic Fulshi clip sterilization resulting in subsequent pregnancies. The accompanying videos demonstrate the potential cause of the "failure" as well as the intraoperative management to re-sterilize the patients.

Finally, a brief literature review of such cases is included together with a suggested management plan.

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FREE COMMUNICATIONS / DIGITAL COMMUNICATIONS SESSION

Thrombus-like structures seen in the infundibular-pelvic ligament during the laparoscopic management of ovarian torsion.

Georgiou C

After obtaining a directed history and performing an appropriate examination, the management of lower abdominal pain in the non-pregnant female usually involves some form of imaging in order to ascertain a possible gynaecological cause.

Ultrasound scanning is the initial gynaecological imaging modality of choice, although it may not necessarily be performed in such cases as the presenting history and examination may vindicate a diagnostic laparoscopy. Alternatively, depending on the background of the initial

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assessor, a CT scan may be performed prior to discussion with a gynaecologist.

One of the common, but difficult to diagnose presentations of lower abdominal pain is ovarian torsion. Although the above imaging modalities are not necessarily conclusive, the presence of an associated enlarged ovary is suspicious of ovarian torsion.

Laparoscopic findings usually include an edematous, and sometimes haemorrhagic, ovary that may appear non-viable. Historically, the adnexae were usually removed because there was a suggestion that untwisting the adnexae could increase the risk of thromboembolism. More recently recommendations suggest that the ovary is de-torted and some form of ovarian reduction is contemplated to avoid recurrence in large ovarian masses.

This presentation includes the case of an 18yr old woman in whom a diagnostic laparoscopy was performed based on the possibility of ovarian torsion. An enlarged 8cm bilobed, torted ovarian mass was seen that confirmed this diagnosis. However, during the laparoscopic procedure, structures suggestive of thrombi were identified within the fascia of the infundibular-pelvic ligament.

A brief literature review of the evidence of thrombosis and thromboembolism during ovarian torsion is also included.

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FREE COMMUNICATIONS / DIGITAL COMMUNICATIONS SESSION

Laparoscopic myomectomy of large intramural fibroid in a Jehovah's Witness

Choi S, Caska P, Cario G, Rosen D, Reyftmann L, De Rosnay P, Chou D

This is a surgical video presentation of a laparoscopic myomectomy for an 11-cm intramural fibroid in a Jehovah's Witness. Besides the considerable size of the fibroid, the fact that blood transfusion was unacceptable to this lady made haemostatic control a major challenge. This video demonstrated multiple surgical strategies to reduce intraoperative bleeding prophylactically.

This 32-year-old nulliparous lady presented with significant pressure symptoms and a 22-week-sized uterus. Preoperative ultrasound and MRI scans showed a fundal fibroid occupying the majority of the pelvic cavity, extending up to the level of S1.

Under laparoscopy, firstly, the uterine arteries on both sides were dissected retroperitoneally under anterior approach and then ligated with LigaClip. Secondly, bilateral infundibulopelvic ligaments were skeletonized and loosely ligated with sutures, in order to further reduce uterine blood supply during the operation. These sutures were later released upon the completion of myomectomy. Thirdly, diluted vasopressin was infiltrated to the myometrium along

the incision line. Nevertheless, in spite of these prophylactic measures, the uterine wall still proved to be remarkably vascular. Several active bleeders were encountered during incision over the myometrial capsule. Fortunately, with additional haemostatic stitches, the bleeding was under control and the fibroid was successfully enucleated.

The operation was finished with closure of the myometrial defect using V-Loc and electrical morcellation of the fibroid. Haemostasis was satisfactory at the end of the procedure. She recovered well without significant anaemia in the postoperative period.

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FREE COMMUNICATIONS / DIGITAL COMMUNICATIONS SESSION

Can we predict posterior compartment Deeply Infiltrating Endometriosis (DIE) using office Sonovaginography (SVG) in women undergoing laparoscopy for chronic pelvic pain?

Reid S, Casikar S, Reid G, Abbott G, 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 2012). 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 visualization of the posterior compartment. SVG was used to predict posterior compartment deeply infiltrating endometriosis (DIE) prior to laparoscopy. The correlation between SVG findings and laparoscopic findings was analyzed to assess the ability of SVG to predict posterior compartment DIE.

RESULTS: 178 consecutive women with pre-operative SVG and laparoscopic outcomes were included in the final analysis. At laparoscopy, 137/178 (77%) women had endometriosis (35.4% isolated peritoneal endometriosis, 27% ovarian endometrioma/s, 32.6% deep infiltrating endometriosis). At laparoscopy, 44/178 (24.7%) had POD obliteration and 40/178 (22.5%) 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 90.2%, 92.7%, 78.7% and 96.9%, respectively; for bowel endometriosis 87.5%, 92.8%, 77.8%, 96.2%, respectively.



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The sensitivity, specificity, PPV and NPV for SVG in the prediction of lateral DIE (uterosacral ligament nodules) was 40.0%, 97.6%, 50.0% and 97.6%, 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.

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Small bowel injury at laparoscopy to drain infected pelvic collection

Chohan K, Anpalagan A

Infected pelvic collection is not an uncommon gynaecological problem. Treatment usually consists of antibiotics, or antibiotics and surgical drainage. Surgical drainage can be achieved via radiological guidance (CT or Ultrasound), laparoscopy, or laparotomy. Herein we report three cases of small bowel injury after attempted laparoscopic drainage for infected pelvic collections.

In two of them the collections were due to tubo-ovarian abscesses, and one was a post caesarean section collection. Case 1, 2 and 3 had Veres needle and radially expanding port, Veres needle and Optiview port, and palmers point 5mm port, direct entry respectively. All three patients required midline laparotomy conversion to repair the injury. The intended procedure was not completed in any of them. Three different post advanced laparoscopic fellowship surgeons were involved in each of these cases. There appears to be no report of similar cases in the literature. Should one require a surgical drainage, we may consider image guided drainage as the first option in our department in the future. If that fails an open entry technique laparoscopy or laparotomy would be considered rather than closed entry laparoscopy. A laparoscopy or laparotomy is best done after at least 4-6 weeks of antibiotic treatment to reduce the risk of injury due to acute inflammation.

REFERENCES:

1. Journal of Pediatric Surgery 2011;46:1385-1389

2. Int J Colorectal Dis 2012;27:199-206

3. Infect Dis Obstet Gynecol 2003;11:45-51

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Laparoscopic excision of bladder endometriotic nodule

Lanziz H, Swift G

The incidence of bladder endometriosis in the general population is considered to be 1%. The lesion can involve solely the peritoneum, or sometimes the full thickness of the bladder. We present a video of the surgery performed on a 30-year-old woman with bladder endometriosis. She was referred with a history of menorrhagia, dysmenorrhoea, and cyclical dysuria. Her pelvic computed tomography and ultrasound revealed the presence of a mass within the bladder wall. After discussion with the urological team, the mass was thought to be an endometriotic nodule.

Joint surgery was organised involving the urologist for the cystoscopic work and the gynaecologist for the laparoscopic elements. 4 ports were used as the standard laparoscopic approach, inserted after Hassan entry. The surgery commenced with defining the lesion laparoscopically and cystoscopically. After identifying the lateral margins, and opening the vesico-vaginal fold, the lesion was then finally mobilized. Once the lesion was mobile, the bladder was entered and the lesion excised from the bladder, whilst preserving as much healthy tissue as possible. The bladder was then closed in vertical fashion from posterior to anterior. 2-0 PDS was used to close the bladder and the tightness was checked at the end of procedure by filling the bladder with 600ml of fluid. An in-dwelling urinary catheter was left in situ for 10 days. The patient had an excellent recovery and bladder function was normal at 6 weeks post-operative follow-up.

Unique aspects of this case are the use of monopolar spatula energy, the large size of the lesion requiring excision of a large part of the bladder, and the vertical closure (rather than the usual horizontal closure).

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Robotic surgery and the da Vinci Surgical System – pathway to accreditation as experienced by a tertiary level benign endo-gynaecological unit
de Rosnay P, Cario G, Rosen D, Chou D, Cooper M, Reid G, Reyftmann L, Choi S

Intuitive Surgical introduced the da Vinci® Surgical System in 1999. Since then there have been a number of modifications culminating in the third generation 'da Vinci Si' launched in April 2009.

The da Vinci Surgical System comprises three components: a surgeon's console, a patient-side robotic cart with 4 arms manipulated by the surgeon (one to control the camera and three to manipulate instruments), and a high-definition 3D vision system.

Today the 'robot' is used across a range of surgical specialties including urology, colorectal, head and neck, cardiothoracics and general surgery. However, it is in the field of gynaecological surgery that the robot has shown rapid expansion in recent years.

Intuitive Surgical has introduced a training program to 'optimise safety, efficacy and utilisation' of the robot. This involves progression through a number of phases including completion of on-line training modules, participation in an animal workshop, observation of live surgery, culminating in proctoring by an accredited robotic surgeon.

We present our experience of the accreditation process, which involved a combination of local training as well as instruction in an approved training centre in the United States.

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Laparoscopic repair of intrapartum uterine rupture and uterovaginal detachment

Lee S, Tan JJ-S

Urgent ventouse extraction was performed on a 30 year-old patient for prolonged fetal bradycardia in second stage of labour. Post delivery, omentum was found extruding from the patient's vagina.

On speculum examination, an obvious vaginal evisceration was not evident, and a deep tear causing exposure of ischio-rectal fat (instead of omentum) was thought to be the diagnosis. However, on bimanual examination, peritoneal contents including the liver and gall bladder could be palpated and a large anterior full thickness uterovaginal tear was assumed. A decision was made to perform a diagnostic laparoscopy to assess the injury.

In addition to the abovementioned tear leading to detachment of the uterus from the vagina with narrow intact vagina posteriorly, a longitudinal midline uterine rupture extending toward the uterine fundus was also observed.

This video presentation demonstrates the ensuing surgical technique employed to reattach the uterus and cervix to the vagina followed by the repair of the significant uterine rupture via a laparoscopic approach with the novel application of everyday surgical tools.

Due to the minimally invasive surgical approach, the patient underwent an uncomplicated postoperative recovery and was able to be discharged home on day 3 postoperatively.

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Barbed sutures: Are they safe for vault closure at laparoscopic hysterectomy? Is there any evidence?
Manley T, Tsaltas J, Najjar H

Unidirectional and bidirectional barbed sutures are commonly employed in gynaecological surgery as a method of vault closure. The major benefit of these sutures is their ease of use, requiring no knot tying, which in turn results in a reduction in operating time. Available evidence would suggest that barbed sutures oppose tissue with at least equal strength as conventional sutures and may even disperse the forces more equally along the wound. There are no randomized prospective studies comparing barbed sutures and conventional sutures used for vault closure at the time of hysterectomy. There are two retrospective cohort studies comparing conventional sutures to barbed sutures for vaginal vault closure Siedhoff et al(1) and Neubauer et al(2). The larger of the two studies (Siedhoff et al) included 387 patients and found a decreased incidence of vault dehiscence in the barbed suture group. The other included 134 patients and had no dehiscence in either group. They concluded from this that barbed sutures were safe and well tolerated.

Some local and international experts have tried barbed sutures and have had vault dehiscence which they believe may be related to the suture (3). Given the scarcity of robust safety data relating to vault closure, should barbed sutures be used for this purpose?

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The prediction of pouch of Douglas obliteration using off-line analysis of the TVS 'sliding sign': inter- and intra- observer agreement

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 the inter-/intra-observer agreement in predicting pouch of Douglas (POD) obliteration (secondary to endometriosis) at off-line analysis of two-dimensional (2D) 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 observers. Four of the observers specialised in gynaecological ultrasound, while the other two observers specialised in fetal medicine. The sonologists viewed the TVS 'sliding sign' technique in 2 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. Inter-/intra-observer agreement among the six sonologists was evaluated.

RESULTS: Presence/absence of POD obliteration was confirmed at laparoscopy in 24/30 (80.0%) women. Agreement (Cohen's kappa with 95% confidence intervals) between any 2 examiners in the assessment of the 'sliding sign' in both anatomical regions (anterior rectum/ retro-cervix and recto-sigmoid/posterior fundal region) ranged from 0.35 - 0.93 for all six observers, compared to 0.63 - 0.93 when the two fetal medicine observers were excluded. 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, p-value < 0.01). When comparing all six observers for the multiple rater agreement on the prediction of POD obliteration, overall Fleiss' kappa was 0.43, compared to 0.69 for the four gynaecological ultrasound specialists. Intra-observer agreement among the six examiners for the interpretation of the 'sliding sign' and prediction of POD obliteration ranged from kappa values of 0.60 - 0.95 and 0.46 - 1.0 (p-value < 0.01), respectively, compared with the four gynaecological sonologists with kappa values ranging from 0.71 - 0.95 and 0.67 - 1.0 (p-value < 0.01), respectively, when the two fetal medicine specialists were excluded.

CONCLUSION: The high inter- and intra-observer correlation between gynaecological sonologists in evaluating the "sliding sign" for prediction of POD obliteration ranged from substantial to almost perfect agreement. This study validates the dynamic real-time TVS "sliding sign" technique for the prediction of POD obliteration, which has major implications for the surgical planning and counselling of women with chronic pelvic pain / suspected endometriosis prior to their surgery.

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Diagnostic accuracy for the prediction of Pouch of Douglas obliteration using 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 the diagnostic accuracy in predicting pouch of Douglas (POD) obliteration (secondary to endometriosis) at off-line analysis of two-dimensional (2D) 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 observers. Four of the observers specialised in gynaecological ultrasound, while the other two observers specialised in fetal medicine. The sonologists viewed the TVS 'sliding sign' technique in 2 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 among the six sonologists was evaluated.

RESULTS: "Gold standard" laparoscopy findings were known for 24/30 (80.0%) women, whereas the POD obliteration outcome for the remaining 6/30 (20%) cases was determined by an experienced clinician in the interpretation of the "sliding sign". For the prediction of POD obliteration for all six observers, the TVS "sliding sign" test gave an accuracy, sensitivity, specificity, positive and negative predictive value of 70.2 - 100%, 33.3 - 100%, 57.6 - 100%, 50.0 - 100%, 85.2 - 100%, respectively. When comparing the four gynaecological observers, the results for accuracy, sensitivity, specificity, positive and negative predictive value were 93.1 - 100%, 92.9 - 100%, 90.9 - 100%, 77.8 - 100%, and 97.7 - 100%, respectively. Unsure cases were excluded from the accuracy analysis and ranged from 0% - 11.7% for the gynaecological ultrasound specialists vs. 3.33% - 21.7% for the two fetal medicine specialists.

CONCLUSION: The TVS "sliding sign" technique for the prediction of POD obliteration appears to have very acceptable diagnostic accuracy, particularly amongst

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sonologists specialising in gynaecological ultrasound, and should be considered in the pre-operative imaging work-up for all women with suspected endometriosis.

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