



Australasian Gynaecological
Endoscopy & Surgery
Society Limited

the Δ from
pelvic every
floor angle

AGES
Pelvic Floor
Symposium &
Workshop XIV

16 & 17
August 2013
Hilton Sydney
Australia

Program
&
Abstracts

International Guest Speakers

Prof. Cheryl Iglesia *USA*

Assoc. Prof. T S Lo *Taiwan*

Prof. Karen Noblett *USA*

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PROGRAM ABSTRACTS

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WELCOME

Dear Colleague,

On behalf of the Australasian Gynecological Endoscopy & Surgery Society (AGES), it is our pleasure to welcome you to the AGES XIV Pelvic Floor Symposium to be held in Sydney on 16 and 17 August, 2013. The theme of the meeting is "The Pelvic Floor from Every Angle".

AGES continues to consolidate its position nationally as the pre-eminent surgical society in Gynaecology, and this meeting carries on a commitment to Pelvic Floor Surgery which began fourteen years ago and has gone from strength to strength, acknowledging the work done by gynaecologists in this important area of our practice.

AGES has invited a very strong international as well as local faculty to provide a program that will have relevance to all practising in this field of surgery. Our invited guests from abroad are Cheryl Iglesia and Karen Noblett from the US, and T S Lo from Taiwan. The topics will span a wide range including mesh controversies, the treatment of incontinence and the use of robotics in POP surgery. Obstetric injuries, female cosmetic surgery and the consequences of female genital mutilation are also covered, making the program diverse, relevant and of practical significance to the practitioner at the coalface.

Innovative techniques, important perioperative issues, and the perennial favourite – live surgery – ensure a strong program of interest to all.

We urge you to attend the Chairmen's Choice free communications session, and the Digital Free Communications session.

We are delighted to have secured the Museum of Contemporary Art as our Gala Dinner venue, with a special private viewing, rarely available at this special gallery.

Welcome to Sydney for what promises to be a memorable event.



Dr Jim Tsaltas
AGES President

Assoc. Prof. Alan Lam
AGES Immediate Past President
Conference Co-Chair

Assoc. Prof. Harry Merkur
AGES Honorary Secretary
Conference Co-Chair

DAY 1

Friday 16 August

Hilton Sydney
Level 3 Ballroom

0730-0755 Conference Registration

SESSION 1

0755-1000 POP SURGERY – MULTI PERSPECTIVES

Sponsored by Stryker

Chairs: J Tsaltas, A Rane

0755-0800 Conference Opening and Welcome
J Tsaltas

0800-0820 Advances and controversies in pelvic organ prolapse surgery
A Lam

0820-0840 To mesh or not to mesh? – US perspective
C Iglesia

0840-0900 The role of vaginal mesh in pelvic floor surgery after FDA safety communication – Asian perspective
T S Lo

0900-0920 The role of minimally invasive surgery in the treatment of pelvic organ prolapse
K Noblett

0920-0950 Issues confronting the corporate sector in pelvic organ prolapse

0920 Boston Scientific:
Committed to pelvic floor repair
A Kirkemo
(Medical Director, Urology & Women's Health)

0935 What is American Medical Systems' response to the medico-legal challenges in the prolapse market?
R Morton (Chief Surgical Officer)

0950-1000 Questions and discussion

1000-1030 Morning Tea and Trade Exhibition

SESSION 2

1030-1215 "OH NO! WHAT SHOULD I DO NOW?"

Sponsored by Karl Storz Endoscopy

Chair: A Lam

1030-1145 Interactive session with medical and legal expert panel (Transponder session)

Panel: C Iglesia, K Noblett, T S Lo, M Carey, A Rane, A Korda, G Haysom, R Ford

Fellow case presentations:
E Nesbitt-Hawes, C Smith

- Recurrent prolapse – when to seek a second opinion
- Managing intra-operative complications
- Recurrent mesh complications
- Chronic pain following POP repair
- Fistula after incontinence / POP surgery

1145-1215 JOINT KEYNOTE LECTURES

Chair: H Merkur

Counselling and consent for POP surgery

1145-1200 Medical perspective
K Noblett

1200-1215 Medico-legal perspective
G Haysom

Questions and discussion

1215-1315 Lunch and Trade Exhibition

SESSION 3

1315-1515 CHAIRMEN'S CHOICE FREE COMMUNICATIONS

Sponsored by Stryker

Chairs: A Rosamilia, M Carey

1315-1325 A retroperitoneal approach to minimally invasive mesh sacro-hysteropexy
Behnia-Willison F, Garg A, Miller B

1325-1335 Evaluating safety, feasibility and cost implications of urogynaecological procedure in a 24 hrs day case surgery setting: is it a valid option
Pattnaik P, Iyer J, Rane A

1335-1345 Robotic-assisted removal of TVT mesh: video presentation of a case report
Ma J, Carey M

1345-1355 Are TVT and TVT Exact equivalent: a retrospective analysis
Young N, Letouzey V, Ulrich D, Saunder N, Lee J, Edwards G, Rosamilia A

1355-1405 Management of serious mesh complications of laparoscopic sacrocolpopexy
O'Shea R, Seman E, Miller B

1405-1415 Laparoscopic vesicovaginal fistula repair
Saunder N, Rosamilia A

1415-1425 Cystocele recurrence following laparoscopic sacrocolpopexy: how low does the mesh go?
Wong V, Guzman Rojas V, Choi S, Shek C, Chou D, Moore K, Dietz HP

1425-1435 Relief of urinary symptoms after pudendal nerve release: a case report
Chow JSW, Loeffler A, Jarvis SK, Vancaillie TG

1435-1445 MiniArc Monarc suburethral sling in women with stress urinary incontinence – an RCT – 12m follow up
Lee J, Rosamilia A, Dwyer P, Lim Y, Thomas E, Murray C, Fitzgerald E, Leitch A, Polyakov A, Schierlitz L (Young N presenting for Lee J)

DAY 2

Saturday 17 August

Hilton Sydney

Level 3 Ballroom

- 1445-1455 Outcomes of patients who declined randomisation to Miniarc versus Monarc: A retrospective study *Young N, Rosamilia A, Lee J*
- 1455-1505 EndoStitch with V-Loc sutures for pelvic floor repairs *McMaster-Fay R*
- 1505-1515 Groin pain complicating the TVT-O procedure: an ultrasound evaluation of the anatomical location of the TVT-O tape in relation to the obturator Neurovascular Bundle *Al-Salihi S, Daborn JP, Lim J, Carey M*
- 1515-1545 Afternoon Tea and Trade exhibition

SESSION 4

1545-1700 OBSTETRICS AND UROGYNAECOLOGY

Sponsored by Olympus

Chair: R O'Shea, H Najjar

- 1545-1600 Intact perineum – what's intact about it? *J Rikard-Bell*
- 1600-1615 Obstetric anal injury – prevention and management *F Chao*
- 1615-1630 Role of imaging and manometry in the assessment of obstetric anal sphincter injury *J O Daly*
- 1630-1645 Management of obstetric fistula *H Krause*
- 1645-1700 Obstetric trauma and the urogynaecologist – PROLONG Study *G Burton*
- 1700-1715 Morbidly adherent placenta – oncologist or urogynaecologist or neither! *S Salfinger*
- 1715-1730 Questions and discussion

1900 for 2000 Gala Dinner

Museum of Contemporary Art
Harbourside Room
Private gallery viewing
Complimentary coach transfers provided.
Please assemble in the hotel foyer at 1830.

SESSION 5

0800-1000 LIVE SURGERY

Sponsored by Stryker

Transmitted from the Mater Hospital Sydney
'Pearls and Pitfalls' of POP Surgery

Moderators: R O'Shea, C Iglesia, K Noblett

Surgeons: A Rane, A Lam, A Rosamilia

3 Cases

Mater Hospital Coordinators: R Ford, M Mangat

- Transvaginal mesh repair
- Mid-urethral sling
- Laparoscopic mesh repair

Literature review and discussion:

- Early experience of puborectalis sling *A Korda*
- Effect of uterine preservation on outcome of laparoscopic uterosacral suspension *R O'Shea*

1000-1030 Morning Tea and Trade Exhibition

SESSION 6

1030-1200 OPTIONS FOR THE MANAGEMENT OF PELVIC FLOOR DYSFUNCTION

Sponsored by Boston Scientific

Chairs: S Lyons, M Ritossa

- 1030-1050 Sacral neuromodulation for the treatment of voiding dysfunction and faecal incontinence *K Noblett*
- 1050-1110 The management of vaginal stenosis and shortening following POP surgery *M Carey*
- 1110-1130 Vaginal oestrogen therapy in pelvic floor disorders – the evidence *C Benness*
- 1130-1150 Botox in pelvic floor disorders including chronic pelvic pain – where, when, how and outcomes *J Chow*
- 1150-1205 Questions and discussion

1205-1230 KEYNOTE LECTURE

Chair: M Ritossa

Biologics and their role in pelvic reconstructive surgery

C Iglesia

1230-1330 Lunch and Trade Exhibition

DAY 2

Saturday 17 August

Hilton Sydney
Level 3 Ballroom

Free Communications Digital Presentations

Exhibition area

- 1230 A novel management for vaginal atrophy – platelet rich plasma *Behnia-Willison F, Miller B, O'Shea R, Naidoo R*
- 1235 A case-notes review of treatments of vaginal mesh exposure *Behnia-Willison F, O'Shea R, Miller B, Seman E*
- 1240 Laparoscopic management of ovarian ectopic pregnancy *Harris A, Nikam Y*
- 1245 Rudimentary horn pregnancy diagnosed by ultrasound and treated by laparoscopy - a case report and review of the literature *Berkowitz E, Molnar R, Bustan M, Kadan Y, Romano S*
- 1250 Disconnected: a case of tubo-uterine fistula *Berkemeier S, Chang T*
- 1255 OEIS complex – a rare complication of twin pregnancy *Maindiratta B, Lim B H, Brothers L*
- 1300 Ovarian ectopic pregnancy – a challenging diagnosis *Maindiratta B, Patel S, Chin G*
- 1305 Robotic sacral colpopexy and oophorepexy *Al-Salih, Carey M*

SESSION 7

1330-1445 “I AM STILL WET, DOCTOR!”

Sponsored by American Medical Systems

Chairs: A Yazdani, A Korda

- 1330-1345 The anatomical dynamics of mid-urethral slings in extensive pelvic reconstruction surgery *T S Lo*
- 1345-1400 Update on the management of slings for stress urinary incontinence *A Rosamilla*
- 1400-1415 Update on the management of overactive bladder *G Burton*
- 1415-1430 Sling now or sling later – approach to occult stress incontinence *C Iglesias*
- 1430-1445 Questions and discussion
- 1445-1515 Afternoon Tea and Trade exhibition

SESSION 8

1515-1445 FEMALE SEXUALITY, FUNCTION & DYSFUNCTION

Sponsored by Johnson & Johnson Medical

Chairs: J Abbott, K Harrison

- 1515-1535 Sex, lies and suburethral tape *T Hallam*
- 1535-1555 Female perception of female genitalia *A Rane*
- 1555-1615 Female genital mutilation – how to cross the cultural divide *N Varol*
- 1615-1635 Female genital cosmetic surgery – the current American craze! *C Iglesias*
- 1635-1650 Questions and discussion
- 1650-1700 Closing remarks and award presentation *J Tsaltas*



Harbour Bridge

PROGRAM ABSTRACTS

FRIDAY 16 AUGUST

Friday 16 August / Session 1 / 0800-0820

ADVANCES AND CONTROVERSIES IN PELVIC ORGAN PROLAPSE SURGERY

Lam A

Pelvic floor reconstructive surgeons are practising in a COMPLEX social -medico-legal CLIMATE marked by increasing prevalence of pelvic organ, increased expectations of surgical intervention, myriad of surgical techniques, dynamic technological breakthroughs, lack of high-quality evidence, and conflicting expert opinions.

In recent years, there have been many developments and changes in prolapse and incontinence surgery aiming to improve functional and anatomical outcomes and reduce complications, catalysed by promising outcomes from the use of surgical mesh slings for stress incontinence.

Numerous surgical mesh products and mesh kits with tools to aid the delivery and insertion of mesh transvaginally have been introduced into surgical practice. The rapid turnover of grafts/meshes and new surgical techniques have made it difficult to properly evaluate the efficacy and safety of products, devices or actual surgeries.

In 2008, the FDA released a Public Health Notification to inform clinicians and patients of adverse events related to the use of surgical mesh in pelvic organ prolapse. In July 2011, the FDA issued an Update on the Safety and Effectiveness of Transvaginal Placement of Urogynecologic Mesh for Pelvic Organ Prolapse. This document has raised alarm and stirred up debate and controversies about the use of mesh in pelvic organ surgery.

In Australia, following the ABC 7.30 report running a story on 'Medical giant faces history-making class action' in October 2012, various media outlets produced related news segments which have caused panic, confusion and fear among the public.

Subsequently, statements from the company mentioned in the 7.30 report, from the Therapeutic Goods Administration (TGA), the RANZCOG, and elsewhere joint statements from the American College of Obstetricians and Gynecologists (ACOG) and American Urogynecologic Society (AUGS), Medicine and Healthcare Products Regulatory Agency (MHRA) in the UK, have been made to reassure clinicians and patients that:

- For the vast majority of women, mesh and tape implants are a safe and effective operation, but as with all surgery, there is an element of risk
- There are different types of mesh for different purposes that have different outcomes
- There is not enough supporting evidence to justify taking mesh off the market.
- Pelvic organ prolapse vaginal mesh repair should be reserved for high-risk individuals

- Surgeons placing vaginal mesh should undergo training specific to each device and have experience with reconstructive surgical procedures and a thorough understanding of pelvic anatomy
- Patients should be informed about all treatment options, including the pluses and minuses of each option for pelvic organ prolapse

AUTHOR AFFILIATION: Assoc. Prof. Alan Lam; Centre for Advanced Reproductive Endosurgery (CARE), St Leonards, NSW, Australia.

Friday 16 August / Session 1 / 0820-0840

TO MESH OR NOT TO MESH? US PERSPECTIVE

Iglesia C

INTRODUCTION: Synthetic vaginal mesh kits for prolapse were cleared by the US Food and Drug Administration (FDA) in April 2004. Use of synthetic mesh for prolapse repairs peaked in 2006, with approximately 32.6% of prolapse repairs involving surgical mesh and then declined to 27.5% in 2010 after the initial 2008 FDA public health notification on vaginal mesh.¹

Fast forward to 2013, and several trocar-based vaginal mesh kits are no longer manufactured and there has been a significant decline in mesh use as legal cases have mounted. New data exist on safety and efficacy of vaginal mesh for prolapse to help guide surgeons and inform patients. Use of mesh may be most appropriate in recurrent prolapse, particularly that involving the anterior compartment.

OBJECTIVES: The objectives of this lecture are to:

1. Provide a timeline of occurrences surrounding initial clearance of devices based on 510k predicates through the issuance of 522 post-market studies.
2. List issues surrounding some of the current legal cases in the US
3. Review evidence supporting vaginal mesh use for prolapse as well as known safety concerns and complications²⁻³
4. Introduce current trials and the US Pelvic Floor Disorders Registry

REFERENCES:

1. Rogo-Gupta L, Rodriguez LV, Litwin MS, Herzog TJ, Neugut AI, Lu YS, Raz S, Hershman DL, Wright JD. Trends in surgical mesh use for pelvic organ prolapsed from 2000 to 2010. *2012Obstet Gynecol.* 2012 Nov;120(5):1105-15. doi: <http://10.1097/AOG.0b013e31826ebcc2>.
2. Maher C, Feiner B, Baessler K, Schmid C. Surgical management of pelvic organ prolapse in women. *Cochrane Database of Systematic Reviews* 2013, Issue 4. Art No.: CD004014. DOI: 10.1002/14651858.CD004014.pub5.
3. Nosti PA, Iglesia CB. Medicolegal Issues Surrounding Devices and Mesh for Surgical Treatment of Prolapse and Incontinence. *Clinical Obstet Gyn* 2013; 56(2): 221-228.

PROGRAM ABSTRACTS

AUTHOR AFFILIATION: Professor Cheryl B. Iglesia, MD FACOG; Director, Section of Female Pelvic Medicine and Reconstructive Surgery MedStar Washington Hospital Center. Professor, Departments of Ob/Gyn and Urology Georgetown University School of Medicine, NW Washington, DC, United States of America.

Friday 16 August / Session 1 / 0840-0900

THE ROLE OF VAGINAL MESH IN PELVIC FLOOR SURGERY AFTER FDA SAFETY COMMUNICATION: ASIAN PERSPECTIVE

Lo TS

High recurrence rate with pelvic organ surgery has prompted surgeons to seek for a more durable treatment to augment prolapse repairs. At the year of 2010 in the USA, FDA has reported that approximately 300,000 women underwent prolapse surgery where one out of three pelvic organ prolapse (POP) surgeries used mesh, and three out of four of the mesh procedure were done transvaginally. In contrast, FDA has received more than 1,000 reports of complications that were associated with mesh device in the past 3 years since 2008. Thereafter, FDA sent out alert to public on serious complications associated with transvaginal placement of surgical mesh for pelvic organ prolapse. Further update information was kept on releasing to the public on the hazer of the transvaginal mesh.

It is obvious from the beginning that usage of mesh in vaginal prolapse surgery would have its own complications and can be viewed as having local complications, complications to surrounding organs or tissue. The common complications following prolapse surgery using prosthesis material is vaginal mesh exposure. It has been reported that the occurrences is usually within the first year of surgery and presents with symptoms of vaginal discharge, vaginal pain with or without sexual intercourse. Initial treatment using local estrogen cream with or without antibiotics coverage may have a certain success. A section of the mesh excised, partial excision of the exposed mesh or complete removal can be carried out when the mesh exposure persist. Complete removal may be necessary when recurrence occurs. Depending on the nature of the mesh exposure, this can be performed either as an outpatient setting or in the operation theatre.

The occurrence of operative site infections rate ranged from 1% to 4% and abscess formation were about 3% from systematic reviews. Mesh-related infection cannot be avoided completely even with proper sterilization during surgery. In severe cases where the infection is refractory to treatment it may be life threatening as majority of patients are the elderly and has other co-morbidities.

Dyspareunia after mesh placement has been reported with an overall rate of 9.1%. Posterior compartment repair and mesh exposure were a common factor with dyspareunia. Male dyspareunia or "hispareunia" has also been reported in whom their female counterparts developed mesh exposure. It may be easy to address mesh exposure by surgically excising it but assessment of sexual function can be quite complex and should not merely concentrate on genital organs.

Major intraoperative complications involve injuries to adjacent organ via the usage of trocars. A good clinical practice would be to perform cystoscopy and per-rectal examinations at the time of surgery to identify visceral injury hence enabling immediate rectification.

Based on literature review, some of well-designed randomised trials show good outcomes both objectively and subjectively, and especially when compared with standard treatment. The "NICE" study and in their guidance on the surgical repair of vaginal wall prolapse states that "the evidence suggests that surgical repair of vaginal wall prolapse using mesh may be more efficacious than traditional repair of vaginal wall prolapse without mesh". Altman et al has published a randomised trial of mesh and standard cystocoele repair in the New England Journal of Medicine in which for stage 2 or more prolapse they found that mesh repair improved surgical outcome. The Cochrane Review published by Maher in 2010 in which it is stated that "the use of grafts reduces the risks of recurrent vaginal wall prolapse" and that "standard anterior repair is associated with more failures". In Taiwan, our study on 198 patients who underwent surgery for POP, the transobturator non-absorbable anterior vaginal mesh combined with sacrospinous ligament fixation yielded a favorable and sustainable result over 5 years as compared to traditional anterior colporrhaphy with sacrospinous ligament fixation, both in anatomical and subjective success rate. Mesh related morbidities were low and acceptable. Thus, the mesh has a role to play in specific situations.

In summary, there is great divergence of opinion with regard to the safe and appropriate use of vaginal mesh in pelvic reconstructive surgery. The issue of using vaginally inserted polypropylene mesh is currently much debated. More study is needed to come to a conclusion.

AUTHOR AFFILIATION: Assoc. Prof. Tsia-Shu Lo MD; Division of Urogynecology, Department of Obstetrics and Gynecology, Chang Gung Memorial Hospital, Linkou Medical Center / Chang Gung University, Taiwan.

Friday 16 August / Session 1 / 0900-0920

THE ROLE OF MINIMALLY INVASIVE SURGERY IN THE TREATMENT OF PELVIC ORGAN PROLAPSE

Noblett K

Pelvic reconstructive surgery for has undergone tremendous growth over the past decade with the evolving minimally invasive surgical techniques including laparoscopic and robotic-assisted approaches. Laparoscopy has established itself as having a significant role in minimally invasive surgery across most surgical disciplines. In pelvic surgery, although the vaginal approach may offer the most natural route to minimally invasive techniques, advances in gynecologic laparoscopy and robotically assisted techniques have reported advantages over traditional routes while maintaining safety, efficacy and high patient satisfaction. Advantages of laparoscopy include superior visualization, magnification, reduced blood loss, decreased postoperative pain, decreased adhesion formation, and fewer wound complications¹⁻⁷. Like any surgical procedure, increased volume is

FRIDAY 16 AUGUST

required to achieve these advantages after overcoming the initial learning curve⁸. Disadvantages of laparoscopy include costs of specialized equipment, disposable instruments and the need for specialty-trained surgical staff, particularly in respects to robotic-assisted laparoscopy^{9,10}. However, the majority of current data is limited to descriptive case series and retrospective data. These studies, however, do support the fact that laparoscopic and robotic approaches are reasonably safe alternatives to open and vaginal approaches. Few prospective clinical trials have compared the safety, efficacy and cost-effectiveness of various approaches and surgical techniques highlighting challenges in the utility of robotic-assistance and vaginal graft placement.

The objective of this talk is to provide a review of current literature in regards to surgical techniques and clinical outcomes of advanced laparoscopy and robotically assisted surgery as it applies to minimally invasive pelvic reconstructive surgery. Although current literature lacks adequately powered, prospective, randomized control trials to provide conclusive outcomes analyses, the best available data that is pertinent to current clinical practice will be presented.

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2. Medina C, Takacs P. Laparoscopic uterosacral uterine suspension: A minimally invasive technique for treating pelvic organ prolapse. *J Minim Invasive Gynecol*. Sep 2006;13(5):472-475.
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AUTHOR AFFILIATION: K. L. Noblett, MD: Professor and Director, Division of Urogynecology, Department of OB/GYN, University of California, Irvine, California, United States of America.

Friday 16 August / Session 2 / 1145-1200

COUNSELLING AND CONSENT FOR POP SURGERY – MEDICAL PERSPECTIVE

Noblett K

Providing proper counseling and informed consent for surgery is a complex process which requires patients be provided information about the surgical procedure (including the risks, benefits and alternatives), that it is delivered in a way that is understandable and retainable, where there is time to digest the information, consider the options and ask questions. The informed consent has several required components to insure its validity, these include: voluntarism, capacity, disclosure, understanding and decision^{1,2}. These components have specific definitions and are applicable to all surgical procedures. In pelvic reconstructive surgery, the introduction of trans-vaginal mesh (TVM) has brought the issue of informed consent to the forefront and has renewed the vigor in how we approach informed consent for patients undergoing pelvic reconstructive surgery.

Surgeons often consider informed consent as a surgical document, however it is really a process that should occur over the entire relationship with the patient. The consent is both verbal and written, and can be improved with the use of educational materials³. To be a truly informed consent, the process should involve the surgeon, and not one of the team members. When the surgeon provides informed consent it should include: diagnosis, general nature of the contemplated procedure, risks involved, potential of success, prognosis if the procedure is not performed, and alternative medical treatments. These components are commonly referred to as the "elements of disclosure"⁴. The consent process should also include an assessment of the patients' capacity to provide consent and should be free of coercion.

Given the FDA public notification regarding risks of TVM in 2008, and the update in 2011, as well as the ensuing controversy surrounding these procedures, the discussion regarding the use of TVM has placed special emphasis on the risks and benefits. Currently there is level I evidence that supports the use of mesh in the anterior compartment to achieve improved objective and subjective improvement when compared to native tissue repairs⁵. To balance the discussion, a robust discussion regarding the risks of pelvic reconstructive surgery should be outlined for the patient. The unique risks associated with placement of TVM are primarily related to the foreign material being implanted as well as the technique for placement.

This presentation will review the key aspects of an informed consent as well as highlighting the important aspects of counseling a patient undergoing pelvic reconstructive surgery with or without mesh.

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Friday 16 August / Session 2 / 1200-1215

COUNSELLING AND CONSENT FOR POP SURGERY – MEDICO-LEGAL PERSPECTIVE

Haysom G

A medical practitioner has a duty to exercise reasonable care and skill in the provision of professional advice and information to patients. In the case of *Rogers v Whitaker* [1992] HCA 58, the High Court of Australia found that when obtaining a patient's consent to undertake various therapeutic actions, medical practitioners have a duty to provide the patient with sufficient information about the material risks of a procedure to enable the patient to make an informed decision about whether to undergo the procedure. The obligation extends to other types of information that the medical practitioner knows, or should know, the patient would be likely to consider significant, such as the benefits of and alternatives to the proposed procedure.

This presentation will provide a medico-legal perspective on consent and counselling, both generally and more specifically in the context of POP surgery. It will outline what can happen if the consent process breaks down, and will provide some strategies for reducing the risk of a claim or complaint.

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Friday 16 August / Session 4 / 1545-1600

INTACT PERINEUM, WHAT'S INTACT ABOUT IT?

Rikard-Bell J

BACKGROUND: Pelvic floor dysfunction (PFD) is the most common complication after childbirth, affecting up to 94% of women. The exact damage caused by vaginal delivery on the

pelvic floor is still largely unknown, hence the need to study perineal outcome and the risk of developing PFD. Assumptions have been made that women with perineal trauma (including both spontaneous tears and episiotomies) are at an increased risk of PFD compared with those with an intact perineum. A dichotomy exists between preserving the perineum and the consideration of a surgical cut in order to protect the woman from future morbidity. Currently an intact perineum is considered an indicator of good obstetric care – what is the evidence for this?

THE COCHRANE REVIEW: During recent decades the use of episiotomy has decreased to a policy where an episiotomy is performed only where appropriate for maternal or foetal indications. The most recent Cochrane Collaboration (Carroli et al., 2012) investigated the effects of restrictive versus routine episiotomy use during vaginal birth across eight studies. These findings suggest there are significant benefits to adopting a restrictive policy as it results in less Posterior perineal trauma, less suturing and fewer healing complications. However, there was an increased risk of Anterior perineal trauma; the clinical significance of such tears is not yet known. The episiotomy rates in the restrictive group were 28.4 % (range 8-70%), and 75.10% (range 51-100%) in the routine group. With such a variation in definitions and such overlap between episiotomy rates, it is difficult to identify the benefits and complications of each policy. This review did not study the angle, length or depth of the episiotomy.

THE SCANDINAVIAN SERIES: The most convincing evidence supporting the protective effect of episiotomy originates from a series of Scandinavian studies. Laine et al. (2009) and Pirhonen et al. (1998) compared the incidence of obstetric anal sphincter injury (OASI) between Scandinavian countries. They found that Finland, which has the highest rate of episiotomy, has the lowest rate of OASI. A recent Australian study (Twindale et al., 2013) also observed this correlation.

The impact of perineal trauma on the pelvic floor following the first delivery:

A pilot cohort study at a tertiary maternity centre in Queensland, using self-reported quality of life (QOL) questionnaires, demonstrated a relationship between perineal outcome and PFD. Comparing the impact of an intact perineum, episiotomy and spontaneous tear on a primiparous women's pelvic floor function, the findings of this study suggest that women with an episiotomy experience the least morbidity. Women with an episiotomy had the best QOL, reporting the lowest levels of urinary dysfunction, and a trend towards the least amount of distress caused by colorectal anal symptoms and anal incontinence. Conversely, women with an intact perineum reported the highest level of distress caused by the incontinence of stool and flatus. Additional large-scale prospective research is required to further investigate and delineate the impact of childbirth on PFD.

The evidence that episiotomy is a protective factor against PFD is growing. By reducing severe perineal tears and pelvic floor relaxation, episiotomy use aids accouchers in reducing or preventing the physical, emotional and financial costs associated with ongoing morbidity. We need to reconsider the notion that an "intact perineum is the goal of every birthing woman" (Lemay, 2001).

FRIDAY 16 AUGUST

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Friday 16 August / Session 4 / 1600-1615

OBSTETRIC ANAL INJURY – PREVENTION AND MANAGEMENT

Chao F

Obstetric anal injury (OASI) aka 3rd and 4th degree perineal tear is a well-known complication of vaginal delivery with potentially serious long-term consequences and implications for a woman's health.

Ideally, repair of OASI should be performed in theatre and by appropriately trained practitioners. Repair should occur in layers and with use of the appropriate suture material for each layer. Post-repair care should include strategies to reduce swelling acutely, bowel care to avoid the passage of hard stools and in some cases, dietary modification to delay the passage of stools, antibiotic therapy, use of aperients and commencement of a pelvic floor rehabilitation program at 3 days post-partum. All women who have sustained an OASI should be carefully reviewed at 6 weeks by their obstetrician and if symptomatic, be referred to either a perineal clinic, specialist gynaecologist, urogynaecologist or colorectal surgeon for further investigation, counseling and management.

Fortunately, most women (60-80%) are asymptomatic after OASI. Nevertheless, women who have sustained an OASI should be offered an endoanal ultrasound and anorectal physiology studies prior to or at commencement of their subsequent pregnancy and be counseled carefully regarding risk of recurrent OASI and mode of delivery.

The incidence of OASI is often quoted as 1% of all vaginal deliveries. However, many studies have reported an increased incidence of OASI over the last 3 decades. Can we prevent OASI? Potentially modifiable risk factors for OASI are intrapartum factors including

pushing time >30 min, instrumental deliveries especially forceps delivery, no visualization or manual protection of the perineum and midline episiotomy. Pushing time can be easily decreased by earlier intervention if necessary which makes decreasing the use of forceps or ventouse rather more challenging.

Perineal management methods have changed recently for reasons that are unclear and evidence for its benefit sparse. Trochez et al 2011 found that almost 50% of midwives today prefer the 'hands off' (no perineal protection) method of delivery and this preferred method is inversely proportional to the years of experience of the midwife ie. more midwives with less than 5 years experience prefer 'hands off' while more midwives with more than 5 years experience prefer the 'hands on' (manual protection of the perineum) method.

The NICE guidelines 2007 states that either 'hands on' or 'hands off' approach for perineal protection are appropriate. So should we or should we not protect the perineum?

Laine et al 2008 found that instituting and teaching 4 techniques of perineal protection decreased OASI rates from 4% -1% in Norway over a 5 year period. Hals et al 2010 also reported success in decreasing OASI rates over a 5-year period from 5.25% to 1.73% in 4 Norwegian hospitals by teaching the same techniques described by Laine et al. Hal et al found that perineal protection also decreased the rates of OASI in women who had instrumental deliveries. The greatest benefit of perineal protection was seen in Grade 4 tears and manual perineal protection did not have any deleterious effects on the neonate.

Episiotomy has often been listed as a risk factor for increasing perineal trauma and OASI. We know that midline episiotomy is associated with increased risk of OASI. Cochrane recommends restrictive use of mediolateral episiotomy but what defines restrictive use? What is a mediolateral episiotomy? There is now emerging evidence to suggest that the angle, depth and length of an episiotomy affects OASI risk. There are also population studies to suggest that episiotomy use is associated with decreased rates of OASI in normal vaginal deliveries as well as instrumental deliveries.

In summary, OASI can have deleterious consequences to a woman and needs to be managed appropriately. It is difficult to completely prevent the occurrence of OASI but manual perineal protection and an appropriately cut and repaired episiotomy may be protective.

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Friday 16 August / Session 4 / 1615-1630

ROLE OF IMAGING AND MANOMETRY IN THE ASSESSMENT OF OBSTETRIC ANAL SPHINCTER INJURY

Daly JO

One of the main objectives of following women with Obstetric Anal Sphincter Injuries (OASIS) is to assess the anatomical integrity and functional results of primary repair. This enables clinicians to counsel patients about the risks of future anorectal dysfunction including urgency and incontinence. The two most useful investigational modalities are ultrasound, the gold standard being endoanal, and anal manometry. Endoanal ultrasound enables a complete visualisation of the levels of the external and internal anal sphincter at rest and dynamically with high sensitivity and specificity and correlation between residual defects and the development of symptoms. Anal manometry can be used as a screening or diagnostic tool measuring resting pressures that reflect internal anal sphincter function, and squeeze pressures reflecting external anal sphincter function, from which the functional sphincter length can be established. From these assessments, patients can be reassured or offered treatments to minimise the impact of residual injury as well as informing patients about the risks and benefits of vagina delivery and caesarean section in subsequent pregnancies.

Issues to be discussed will include:

- The goals of reviewing patients with OASIS
- The components of anal sphincter assessment: Assessing anorectal symptoms, anal sphincter integrity and function.
- The utility of endoanal ultrasound and manometry
- How these procedures are performed.
- How the results of these investigations can be used to individualise care for these patients postnatally and in subsequent pregnancy.
- Address whether anal sphincter assessment is essential following OASIS? - In whom and when
- Information patients should receive when referring for anal sphincter assessment?

Through addressing these issues, clinician should have a better understanding of the role of follow-up and how the results of such investigations can assist us in counselling women about treatment options, prognosis and their choice of mode of delivery in future pregnancies.

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Friday 16 August / Session 4 / 1630-1645

MANAGEMENT OF OBSTETRIC FISTULA

Krause H

Prolonged obstructed labour is the most common cause for genital tract fistula worldwide. Obstetric fistulae (OF) are caused by either pressure necrosis from obstructed labour or trauma from operative deliveries including caesarean section or instrumental deliveries. Pressure necrosis usually results in the most extensive injuries with often large amounts of tissue sloughing away due to the necrotic injury.

Trauma from operative deliveries including caesarean section or instrumental deliveries can also result in genital tract fistulae. While there is a risk of these injuries with all operative deliveries, in situations where the operating conditions are suboptimal and the operator is inexperienced, injuries are more common. In addition when either the presentation of the patient with obstructed labour to a health care facility is delayed, or where the decision to intervene with an operative delivery is delayed, the technical aspects of an operative delivery are more difficult and inherently the risk of complications increase.

The main risk factor for the development of OF is lack of access to emergency obstetric care. This is often due to a lack of infrastructure in the woman's location with a lack of available health services or a lack of appropriately trained staff at health care facilities. A lack of education and poverty are also significant factors.

The impact of OF on a women is marked. There are numerous possible medical, psychological and social sequelae.

Surgical repair of obstetric fistula can be quite straight forward if there is minimal loss of tissue and minimal scarring, however obstetric fistulae are typically challenging with significant loss of tissue, scarring, urethral involvement or ureteric involvement. Accurate evaluation of the fistula preoperatively is important. Check for the site, size and number of fistulae and also degree of scarring, ureteric involvement or whether the fistula is circumferential.

The basic principles for repair of urogenital fistula includes:

- Adequate exposure – including lateral incisions, cannulation of the ureters if indicated, mobilisation of the bladder from the vagina, and tension free closure of the bladder.
- This should be followed by testing the integrity of the closure eg methylene blue. The vaginal epithelium is closed and a vaginal pack placed.
- Prophylactic antibiotics are recommended and prolonged postoperative bladder drainage is vital.

Prior to discharge the women need to be educated regarding the cause of their fistula, and postoperative limitations must be discussed. The women are given advice for the management of any future pregnancies. Post-fistula complications such as urinary incontinence require further follow-up.

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SATURDAY 17 AUGUST

Saturday 17 August / Session 5 – Live Surgery / 0800-1000

LITERATURE REVIEW AND DISCUSSION: PUBORECTALIS SLING

Korda A

A woman's lifetime risk for surgery for prolapse is 11-19% and between 6-29% undergo additional surgery.

It is said that those who have undergone at least 2 prior procedures have re-operation rates of over 50%

Efforts to combat the failure rates led to the development and introduction of synthetic mesh to augment surgical repairs.

Since 2004 some 100 synthetic mesh devices have been developed.

In 2011, the FDA released a safety communication regarding the use of mesh in prolapse repair and there are significant complications following mesh prolapse repair, which are:

- Erosion
- Pain
- Infection
- Bleeding
- Dyspareunia
- Organ damage
- Scarring shrinkage

As a result there are potential medico-legal implications for mesh usage

Where do we stand in 2013 with POP repair?

Vaginal pessaries are effective and safe and can be offered as an option, however the pessary will have to be used for a patient's lifetime.

Abdominal sacrocolpopexy is effective in treating apical prolapse with an acceptable risk benefit ratio.

We know that there is no benefit in posterior compartment mesh repair.

The results of native tissue POP repair are better than previously thought with high patient satisfaction and acceptable re-operation rates, and

Mesh surgery has good anatomical results but erosion occurs in >10% of cases and there are significant other complications.

The options therefore are either to develop better mesh products or hypothesise that if we correct the principal anatomical defect we may improve POP surgical outcome.

There is evidence that pregnancy and childbirth stretch and tear the puborectalis muscle thereby enlarging the urogenital hiatus.

An enlarged urogenital hiatus and avulsion of the puborectalis muscle are predictors of poor long-term surgical outcome.

The puborectalis sling operation theoretically compensates for the

anatomical defect of the enlarged hiatus and the puborectalis tear.

Preliminary figures suggest that at 3, 6 and 12 months postoperatively there is good subjective satisfaction, reduction of symptoms of prolapse and a statistically significant reduction in the urogenital hiatus.

9% of patients at 3 months, 21% at 6 months and 25% of patients at one year do have clinically measurable prolapse beyond the hymen at follow up.

A multicentre randomised controlled trial of surgery with or without puborectalis sling is currently being conducted.

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Saturday 17 August / Session 6 / 1030-1050

SACRAL NEUROMODULATION FOR THE TREATMENT OF VOIDING DYSFUNCTION AND FAECAL INCONTINENCE

Noble K

Sacral Nerve Stimulation (SNS) delivers non-painful, electrical pulses to the sacral nerves to modulate the reflexes that influence the bladder, sphincter, and pelvic floor to improve or restore function. Sacral nerve stimulation has been an available treatment for refractory voiding dysfunction in the United States since 1997¹, and in Europe since 1994. Over 125,000 implants have been performed worldwide, 53% of which have occurred in the last three and a half years. Since its inception, the therapy has evolved to a minimally invasive procedure that can be performed as an outpatient under local anesthesia. At present, InterStim (Medtronic Inc., Minneapolis, MN) is the only implantable device approved for SNS therapy. Current FDA approved indications for SNS include urinary urge incontinence, urgency-frequency, non-obstructive urinary retention, and most recently (May 2011), fecal incontinence².

Since its introduction, SNS has undergone significant improvements in design and application. The initial implantation technique required general anesthesia and a 5-7cm incision over the sacrum that was taken down to the periosteum. With the introduction of the tined lead in 2002, the procedure requires only a 2mm incision, and can be performed under local anesthesia. In 2006 the second generation IPG was introduced, which is notably one-third the volume of the original. More recently, a curved stylet was added to the tined lead kit. The curved stylet has been postulated to facilitate an advantageous placement of the lead proximal to the nerve root. A recent randomized cross-over trial demonstrated superiority of the curved over straight stylet in achieving motor response at lower amplitudes, thus increasing programming options and potentially extending battery life.³

Both short-term and long-term data (out to 5 years) shows sustained efficacy for voiding dysfunction as well as new five-year

PROGRAM ABSTRACTS

data supporting the long-term benefit for fecal incontinence⁴⁻⁵. Most recently, a randomized prospective study comparing SNS to anticholinergic therapy demonstrated superiority for the SNS group⁶.

This talk will briefly review the technique for implant as well as review the most current literature for urinary and fecal incontinence.

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Saturday 17 August / Session 6 / 1110-1130

VAGINAL OESTROGEN THERAPY IN PELVIC FLOOR DISORDERS – THE EVIDENCE

Beness C

Estrogen deficiency has been implicated in a variety of common conditions in peri and postmenopausal women. These include urinary incontinence, irritable bladder symptoms, recurrent UTIs, prolapse and dyspareunia. This concept is not surprising as estrogen receptors have been shown to be present in the bladder and urethra, the vagina, and in pelvic floor structures. Also, epidemiological studies have shown a high prevalence of urinary symptoms in peri and postmenopausal women.

A Cochrane review of the role of estrogen therapy for female urinary incontinence in 2012, involving nearly 20,000 women, demonstrated that vaginal estrogens can improve urinary incontinence. A similar benefit could not be shown for systemic estrogens. Also, symptoms of frequency, urgency and urge incontinence (the overactive bladder

syndrome) improve more with vaginal estrogen therapy compared with placebo. A further benefit of vaginal estrogen therapy is that it does not require concomitant progestogens which appear to have an adverse affect on lower urinary tract function.

In postmenopausal women there are changes in vaginal flora and pH which allow vaginal colonisation with gram negative bacteria increasing the risk of UTIs. These changes can be reversed by vaginal estrogens and a significant reduction in UTIs can be achieved in postmenopausal women with recurrent UTIs following vaginal estrogen therapy. Urogenital atrophy is common in postmenopausal women resulting in vaginal dryness, pruritus and dyspareunia. These symptoms are best treated by vaginal estrogen therapy as 25% of women may remain symptomatic of these symptoms when on systemic estrogen therapy.

Pelvic floor connective tissue is known to deteriorate following the menopause. Postmenopausal estrogen deficiency is therefore thought to be a likely factor in the multifactorial pathogenesis of pelvic organ prolapse (POP). Therefore vaginal estrogens are often used prior to and following prolapse surgery. However, there is currently limited evidence to support its use in the prevention or management of POP.

Vaginal estrogens, compared with systemic therapy, for urinary symptoms, recurrent UTIs and symptoms associated with urogenital atrophy, have a number of advantages. Vaginal estrogen therapy is more targeted, safer, more efficacious and does not require concomitant progestogen therapy. There is minimal systemic absorption with vaginal estrogen treatment resulting in no significant endometrial proliferation and a much lower risk of venous thromboembolism compared with systemic estrogen therapy. Caution is recommended however, in women with a history of an estrogen dependent cancer.

There is therefore level 1 evidence that vaginal estrogen therapy is of proven benefit for urge incontinence, OAB symptoms, recurrent UTIs and urogenital atrophy. Further research is required to clarify the role of estrogen therapy in the prevention and treatment of pelvic organ prolapse.

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SATURDAY 17 AUGUST

Saturday 17 August / Session 6 / 1130-1150

BOTOX IN PELVIC FLOOR DISORDERS INCLUDING CHRONIC PELVIC PAIN – WHERE, WHEN, HOW AND OUTCOMES

Chow J

Botulinum toxin inhibits the release of acetylcholine at the presynaptic neuromuscular junction in peripheral nerve endings. This promotes muscle paralysis. It is available in two forms – onabotulinumtoxin A (Botox) and abobotulinumtoxin A (Dysport).

Botulinum toxin has shown well established benefit in treating neurogenic lower urinary tract disorders. Evidence regarding its use in non neurogenic overactive bladder and in interstitial cystitis/bladder pain syndromes will be presented.

Botulinum toxin is also used in the setting of chronic pelvic pain, with evidence for its use in pelvic floor myalgia or levator spasm, and more limited data for its use in provoked vestibulodynia.

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Saturday 17 August / Session 6 / 1205-1230

BIOLOGICS AND THEIR ROLE IN PELVIC RECONSTRUCTIVE SURGERY

Iglesia C

INTRODUCTION: Complications related to synthetic mesh use--including contraction, infection, inflammation, and erosion--can lead to serious adverse clinical events. There is an ongoing debate about whether vaginal prolapse repairs need permanent biomaterial. The current status of biologics and POP repair include limited data on safety and efficacy. There may be theoretically fewer mesh-related complications with biologics compared with synthetics, but concerns remain regarding tensile properties and foreign body reactions as well as early break-down of the graft all of which may negatively impact outcomes. Biologic graft modifications and implantation

techniques may have important clinical implications.

OBJECTIVES:

1. List currently available biologic grafts
2. Compare and contrast cross-linked versus non cross-linked grafts
3. Cite outcome data for randomized trials comparing vaginally placed interpositional biologic grafts compared to native tissue and synthetic mesh repairs

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Saturday 17 August / Session 7 / 1330-1345

THE ANATOMICAL DYNAMICS OF MID-URETHRAL SLINGS IN EXTENSIVE PELVIC RECONSTRUCTIVE SURGERY

Lo TS

Since the introduction of the 'Integral Theory' (Petros and Ulmsten 1993), there have been numerous ultrasound studies to appreciate how mid-urethral slings function. Mid urethral tension free vaginal tape (TVT) sling procedures incorporate integral theory principles. Functional kinking of the mid urethra during increased intra-abdominal pressure provides continence. The pubourethral ligaments provide the necessary urethral support for functional kinking to occur. Therefore, the implanted TVT sling replaces the defective ligament structures to restore normal anatomy and provide mid urethral functional kinking. A urethral knee angle observed at the middle segment of the urethra during maximal straining in the majority of cured patients after the TVT procedure on real-time ultrasonography was first reported (Lo et al 2001), which supports this theory.

Ultrasound appears to show similar morphological features between the TVT tape and the tension free vaginal tape obturator procedure (TVT-O, TOT) (de Tayrac et al. 2006), the latter seems to decrease the risk of complications such as bowel, bladder and vascular injuries.

The functioning of mid-urethral slings (MUS) may be due to a form of dynamic kinking of the urethra during stress or the movement of the tape against the symphysis, compressing the tissue between the tape and the symphysis or a combination of both mechanisms

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were further explained (Dietz and Wilson 2004). These dynamic interactions between the sling and urethra depend on both the proximity of the tape and the type of urethral descent. There have been several types of urethral descent described (Yang et al. 2008). One of which has been termed as rotational urethral descent. This form of urethral descent could occur by itself or following an episode of vertical descent and it has been reported that the lower the urethral location of the tape, then the greater the chance of only this type of descent developing (Yang et al. 2008).

The observed urethra kinking around the tape seems to occur with a lower tape and/or more residual anterior vaginal wall prolapse (Dietz and Wilson 2004). It has been shown also that MUS tapes migrated distally with time but remained in the same position relative to the urethra and this displacement was a consequence of anterior vaginal wall prolapse. However with mesh reinforced anterior colporrhaphy, it appeared to draw the tape proximally (Yang et al. 2008). A well placed vaginal mesh in addition could reduce bladder neck mobility in the same manner as a Burch colposuspension and limit the posterior-inferior movement of the bladder during stress. Thus, there could be plausibility that a combination of both anterior mesh repair or anterior colporrhaphy with mid-urethral slings would reduce the effects of dynamic kinking or rotational urethral descent and the function conferred by the slings could be primarily mechanical compression.

A study on ultrasound dynamics of combined MUS and AVM surgery on severe symptomatic pelvic organ prolapse was conducted by Lo et al. The study showed similar short-term outcomes among patient who had SSF with TOT either with anterior colporrhaphy or in combination with TVM that were consistent with other studies (Lau et al. 2011; Huang et al. 2012). There were also no significant ultrasonography morphology differences between the TOT combined TVM group with that of TOT combined anterior colporrhaphy. Similarly, Huang et al. (2012) had reported no distinct differences but had only looked into a shorter term of 3 months follow-up.

Further evaluation in Lo et al study of patients with objective success of USI and those that failed actually showed some fascinating ultrasound findings. Firstly, they had noticed that the scale of movement of mid-urethral tapes from resting to maximum Valsalva were larger in the success group compared to those that failed. As described by Dietz et al (Dietz and Wilson 2004), the compression mechanism for anti-incontinence surgery was possible with movement in an arc like manner to achieve continence. It was noted that mean average tape movement in their study was around 5mm compared to the average of 16mm previously reported (Dietz and Wilson 2004) but the later had no TVM. A possible explanation would be in the presence of TVM movement of tape could be limited but not completely avoided. Findings from Lo et al study suggest that movement was possible when TVM were applied in a tension free manner to allow some range of movement especially at the bladder neck (BN). Rigidity with increased tensioning even in the presence of the elasticity physical property of TVM could affect the success of concurrent mid-urethral surgery by way of reduced possible movement. A larger scale of movement had also allowed some dynamic kinking

previously described (Lo et al. 2001) which was demonstrated in half of the patients in the success group.

Concomitant prolapse surgery has been demonstrated to influence success following MUS procedure. Although there are data to suggest addressing prolapse at similar settings may provide better protection against recurrent USI while some had reported less likelihood to undergo a repeat procedure for USI, other data failed to identify any differences. In our opinion, there could be a range of movement of TVM post surgery and/or BN that might impart an effect on the successful function of mid-urethral sling. A movement larger than this range may lead to voiding dysfunction. Too little the movement could limit the successfulness of the slings, as may be the case with a tight anterior colporrhaphy or TVM.

In conclusion, ultrasound assessment post prolapse and incontinence surgery has generated interesting observations on the dynamic interaction between MUS, mesh, bladder neck and urethra. Literature studies showed that the mobility of tape, mesh and bladder neck within a certain permissible range post surgery may improve patient outcome.

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Saturday 17 August / Session 7 / 1345-1400

UPDATE ON THE MANAGEMENT OF SLINGS FOR STRESS URINARY INCONTINENCE

Rosamilia A

The synthetic mid urethral sling was successfully introduced in the mid to late nineties as the TVT. Recently the 17 year follow up of a very early cohort of 90 women was presented; 62 % were able to be followed up; there was an objective cure rate of 93% and subjectively 87% of women were cured or significantly better with one protrusion noted on examination. The transobturator slings were introduced in 2003 to 2004 both outside-in and inside-out in order to decrease the complication rate associated with retropubic slings. Subsequently, the trend to miniaturisation has continued with development of the minislings.

The evolution of midurethral slings has had its casualties for various reasons; the Anterior IVS, bone anchor slings, Obtape and the TVT secur. Recent modifications have included the development of the TVT exact, the change of the TVT-O to TVT-abbrevo, the development of the Advantage fit to Advantage, the changes to the Miniarc to precise and now pro. Published literature including meta-analysis and registries will be discussed in addition to results of ongoing audits and trials. Some sling complications will be presented. The FDA position on midurethral slings requires further evaluation of the minislings. The evidence for the management of recurrent stress incontinence will be discussed.

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SATURDAY 17 AUGUST

Saturday 17 August / Session 7 / 1415-1430

SLING NOW OR SLING LATER—APPROACH TO OCCULT STRESS INCONTINENCE

Iglesia C

INTRODUCTION: Approach to occult stress incontinence (ie, SUI that is not symptomatic and only becomes symptomatic during clinical or urodynamic testing after the prolapse is reduced) is controversial. Following data from the OPUS trial, 1 expert opinion suggests that a concomitant sling at the time of vaginal prolapse repair is indicated if documented transurethral loss of urine is confirmed preoperatively. What to do in asymptomatic patients undergoing prolapse surgery with no SUI on pre-operative testing remains problematic as patients without symptoms are very intolerant of complications from prophylactic procedures. In the OPUS trial, 6.3 slings need to be placed to prevent urinary incontinence at 12 months. Choice of sling—transobturator versus retropubic—remains equally controversial.

OBJECTIVES:

1. Define and diagnose occult stress urinary incontinence
2. Cite the rate of UI at 12 months and reported complication in the OPUS multicenter RCT

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Saturday 17 August / Session 8 / 1535-1555

FEMALE PERCEPTION OF FEMALE GENITALIA

Rane A

There has been a huge increase in the number of labioplasties being performed in Australia since 2000. Most of the patients are under the age of 24. It is estimated that 60 percent or more teenage girls access pornography before any sexual encounter.

Does this lead to an altered perception of genitalia?

How do women perceive their genitalia and the effect of age and childbearing on it?

How do they feel if they have a negative perception?

Where do they access their information from predominantly?

Are there any cultural differences?

This study has looked at female perception of female genitalia in Australia and India. We believe it just has started the process of understanding genital perceptions and its impact on health.

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Saturday 17 August / Session 8 / 1555-1615

FEMALE GENITAL MUTILATION – HOW TO CROSS THE CULTURAL DIVIDE

Varol N

Female genital cutting (FGC) refers to all procedures involving partial or total removal of the external female genitalia or other injury to the female genital organs for nonmedical reasons. The World Health Organization estimates that between 100 and 140 million girls and women in African countries have undergone FGC, with three million at risk each year. It is most prevalent in 28 countries in Africa and some countries in Asia and the Middle East, as well as in migrant communities from these countries to Europe, United States, Australia and New Zealand¹. FGC has persisted for centuries, as it has deep-seated cultural and perceived religious roots.

It involves excision of the genitalia of the child girl with a blade and, in the more severe cases, suturing the vaginal introitus with an unclean suture like material - usually without anesthesia and with the risk of transmission of infections, including HIV and hepatitis, septicaemia, tetanus, haemorrhage and shock, among many other complications.

Mothers subject their daughters to FGC out of genuine love for them, to protect them, to secure good prospects of marriage, to ensure acceptance in the community and for economic security. This position must be acknowledged when engaging with communities².

Practiced as a matter of social convention, it is linked to different concrete socio-cultural perceptions that are associated with local definitions of gender, sexuality and religion³.

Abandonment efforts need to focus on advocacy by men, as marriageability is a major driving force of this practice. Basic human rights need to be addressed, so economic independence for women becomes a reality and they would no longer have to depend on FGC to ensure marriage and their livelihood. Moreover, if the benefit of this cultural practice is removed, and particularly if it also causes prejudice, disadvantage, becomes a liability and is prosecutable, it can be abandoned in a relatively short time period.

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Saturday 17 August / Session 8 / 1615-1635

FEMALE GENITAL COSMETIC SURGERY: THE CURRENT AMERICAN CRAZE!

Iglesia C

INTRODUCTION: Sexual enhancement surgeries have been increasing in the US since the 1990's, spawned by media hype, pornographic images and general allure. Some US women are

willing to undergo surgical alteration of their genitalia solely for aesthetic improvement. Deceptive claims about cure of stress urinary incontinence, pelvic support defects and G-spot enhancement often are included in marketing materials for genital cosmetic surgery. Ethical issues related to training, practice regulation, informed consent and overall lack of quality outcome data are concerning.

OBJECTIVES:

1. Review history of Female Genital Cosmetic Surgery in the US
2. List types of cosmetic procedures and who is performing them
3. Discuss outcome date, potential complications and ethical implications

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Friday 16 August / Session 3 / 1315-1325

A RETROPERITONEAL APPROACH TO MINIMALLY INVASIVE MESH SACRO-HYSTEROPEXY

Behnia-Willison F, Garg A, Miller B

Minimally invasive approaches to gynaecological procedures are a poorly researched field that deserve due credit, especially with respect to utero-vaginal prolapse repair for which many new techniques are being developed. In the following, we demonstrate the feasibility of a novel retroperitoneal approach to minimally invasive mesh sacro-hysteropexy in correcting global vaginal prolapse.

This method involves Elevate™ mesh kit wings being used to anchor the AMS™ Y mesh and feed the mesh bluntly underneath the peritoneal membrane whilst maintaining patency of the peritoneal membrane. There were three incisions (5mm) made on the right pararectal space and were used to grasp the rigid portion of the wing and reinsert it again underneath the peritoneum in a linear fashion such that the mesh was fed underneath the peritoneum from the sacral promontory to the posterior cervix.

This novel approach to mesh sacrohysteropexy involved minimal dissection and re-suture of the peritoneum leading to impressive reduction in operating time. This resulted in similar recovery times as compared to the traditional trans-peritoneal approach and high patient satisfaction.

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Friday 16 August / Session 3 / 1325-1335

EVALUATING SAFETY, FEASIBILITY AND COST IMPLICATIONS OF UROGYNACOLOGICAL PROCEDURE IN A 24 HRS DAY CASE SURGERY SETTING: IS IT A VALID OPTION

Pattnaik P, Iyer J, Rane A

SETTING: Townsville Hospital ; Townsville ; Queensland

PURPOSE OF STUDY: Evaluation of women who had urogynecological procedures in a 4 year period from 2007 – 2010. Assessing the feasibility, safety and cost effectiveness of ambulatory Urogynecological procedures.

DESCRIPTION OF METHODS & MATERIALS: Clinical records of all women who underwent Urogynecological surgery at the Townsville Day Surgery during the 4 year period. The data collected contained prior medical conditions, BMI, ASA scores, PISQ 12 scores, inpatient unit admission post day surgery with reason for admission.

SUMMARY OF RESULTS: 496 patients underwent urogynecological procedures. There were no intraoperative complications. Most patients were discharged in 24 Hr ambulatory period. Only 2 patients required inpatient admission for drainage of Hematoma. The results were very much in line with the accepted practice of ambulatory urogynecology.

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Friday 16 August / Session 3 / 1335-1345

ROBOTIC-ASSISTED REMOVAL OF TVT MESH: VIDEO PRESENTATION OF A CASE REPORT

Ma T, Carey M

OVERVIEW: This video presentation demonstrates removal of the retropubic components of TVT polypropylene mesh using robotic assistance.

CLINICAL DETAILS: A 60-year-old woman was referred with chronic retropubic, bladder pain, and voiding difficulty following the insertion of a TVT. She had undergone multiple operations for endometriosis and an abdominal hysterectomy in the past. Urodynamic studies and cystoscopy demonstrated bladder outlet obstruction, with the left retropubic TVT strap visualised within the muscularis of the bladder. CT scan of the pelvis and serum inflammatory markers demonstrated no evidence of osteitis pubis. Under cystoscopic control long-acting local anaesthesia and hydrocortisone was injected into the bladder muscularis where the TVT strap was abnormally positioned. The patient reported immediate and medium term relief of her retropubic pain. However, her pain slowly returned and she requested removal of the TVT mesh. The patient was given a range of treatment options and elected to undergo combined robotic and vaginal surgery.

SURGICAL DETAILS: At the commencement of surgery a sub-urethral vaginal incision was made and the vaginal epithelium was dissected and mobilised in a lateral direction on each side. The vaginal component of the TVT mesh was identified and removed. A Hasson entry was used for the laparoscopy. Additional lower anterior abdominal wall ports were placed under vision. The robot was docked. The retropubic space was entered. Using robotic assistance the retropubic component of the TVT mesh was removed. Cystoscopy demonstrated no bladder injury. Six weeks following surgery the patient was reviewed and reported resolution in her retropubic pain and voiding difficulty.

DISCUSSION: Pelvic pain and voiding dysfunction following TVT insertion are known complication of the procedure^{1,2}. These may be secondary to mesh erosion, osteitis pubis, excessive tension or mesh/scar tissue contraction. Treatment can consist of expectant, medical or surgical management. Infiltration of anaesthesia may provide some relief. In this subject the retropubic pain was considered to be related to the left strap of the TVT tape being placed into the bladder muscularis. Surgical removal of mesh has the potential to alleviate the pain in these patients.

Robotic surgery using the Da Vinci system provides the benefits of 3D vision, improved instrument mobility/stabilisation and improved ergonomics compared to conventional laparoscopy, allowing greater surgical precision. However, this comes at an additional cost in consumables, operating time, capital set up and maintenance, lack of tactile feedback and risk of mechanical failure.

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COMPETING INTERESTS: Nil

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Friday 16 August / Session 3 / 1345-1355

ARE TVT AND TVT EXACT EQUIVALENT: A RETROSPECTIVE ANALYSIS

Young N, Letouzey V, Ulrich D, Saunder N, Lee J, Edwards G, Rosamilia A

OBJECTIVES: To determine if TVT and TVT exact are equivalent

BACKGROUND: The TVT has proven efficacy for stress urinary incontinence (SUI) with cure rates between 66% and 90%.^{1,2} TVT exact is a new retropubic sling, which assumes equivalence without evidence. An editorial by P. Dwyer states we should no longer assume that every operation or new device has a similar success rate and safety record until we see the evidence³.

METHODS: The medical records of 109 women were reviewed who underwent TVT or TVT exact by two experienced surgeons at Cabrini or Waverley private hospitals between 2009 and 2012 after Ethics approval was obtained. Follow-up information was obtained from the history and by phone interview with validated questionnaires. Subjective cure was defined as no stress urinary incontinence. Prism was used for statistic analysis; t-test and Mann Whitney test was used for continuous variables and Fisher exact for categorical variables. A p value <0.05 was considered statistical significance.

RESULTS: Of the 109 women, 70 had TVT and 39 TVT exact. Baseline characteristics were similar between women with TVT and TVT exact. Previous prolapse surgery was performed in 28.6% and 28.2% (p = 0.57), burch colposuspension 11.4% and 5.1% (p=0.233), and sling in 5.7% and 2.6% (p =0.409) with TVT and TVT exact respectively. HRT was significantly higher in the TVT group 14.3% compared with TVT exact 2.6% (p =0.046).

Urodynamic stress incontinence was seen in 98.4% and 100% and detrusor overactivity in 21% and 12.1% (p = 0.217) in TVT and TVT exact respectively. Intrinsic sphincter deficiency was present in 60% and 12.1% (p =0.5932) and the mean Leak Point Pressure (LPP) was 68.32 (SD ±31.16) and 76.93 (SD± 43.81) (p=0.615) in TVT and TVT exact.

Complications from the TVT included bladder injury (n=2), sling erosion (n=1), haematoma (n=2), repeat surgery for SUI (n=1) and sling loosening or sling division (n=3) compared with TVT exact only 4 women required loosening or sling division.

The mean follow-up was significantly longer in TVT of 63 weeks (range 3-184) compared to 34 (range 1-112) in TVT exact (p =0.034). Subjective cure was similar between TVT and TVT exact with 59.7% and 53% respectively (p=0.358).

Pre-operative over active bladder symptoms were assessed by the Queensland female pelvic floor questionnaire and were present in

98% and 92.9% (p=0.298). Post-operative urgency symptoms were seen in 54.3% and 56.2% (p=0.569) and urge incontinence 42.9% and 50% in TVT and TVT exact respectively (p=0.4303). Two women required Botox and 7 were on medical treatment for OAB in women that had TVT; 2 were on medical treatment that had TVT exact (p=0.4326).

CONCLUSIONS: TVT and TVT exact may have equivalent outcomes for Stress urinary incontinence despite the significant difference in follow-up length.

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Friday 16 August / Session 3 / 1355-1405

MANAGEMENT OF SERIOUS MESH COMPLICATIONS OF LAPAROSCOPIC SACROCOLPOPEXY

O'Shea R, Seman E, Miller B

This is a surgical video presentation of two cases of mesh exposure (including one case involving bladder mesh perforation) following laparoscopic mesh sacrocolpopexy.

Rates of mesh exposure following laparoscopic mesh sacrocolpopexy range from 1% to 10% in the literature^{1,2}. In one study rates of delayed mesh perforation into the bladder were about 1%² (usually associated with bladder injury at the time of surgery). While for about 20% of cases of mesh exposure topical oestrogen treatment is enough. 80% require definitive surgery by vaginal mesh excision. Sometimes more complicated laparoscopic excision is required.

Both cases had had a hysterectomy some time prior to their sacrocolpopexy.

The first case is a 78 year old woman who had recurrent presentations of persistent mesh erosion between 2010 and 2012 after a laparoscopic sacrocolpopexy in 2010. After conservative management with silver nitrate cautery to granulation tissue and topical oestrogen she had three attempts at resection of the mesh vaginally. She then had an extensive adhesiolysis and resection of the mesh from the vaginal vault laparoscopically. She made a good recovery and at review had no further mesh erosion and ongoing good support of the vagina.

The second case is a 62 year old lady who had a laparoscopic

sacrocolpopexy in 2007. She then had revisions to remove mesh vaginally in October 2009, June 2010 and October 2010. She was also seen by an urologist in 2013 who detected the presence of mesh in the bladder via cystoscopy. A combined procedure was undertaken. Ureters were stented. The mesh was removed laparoscopically. The urologist then completed the repair of the bladder via a midline laparotomy. The patient has made a good recovery with good support of the vaginal walls.

CONCLUSION: Cases of recurrent mesh erosion after laparoscopic sacrocolpopexy may be best treated by complete laparoscopic resection of the mesh at the vaginal vault.

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Friday 16 August / Session 3 / 1405-1415

LAPAROSCOPIC VESICOVAGINAL FISTULA REPAIR

Saunders N, Rosamilia A

Pelvic organ fistula disease in developed countries occurs predominantly as a complication of pelvic surgery, in particular hysterectomy. Fistula can also occur after pelvic radiation, malignancy and obstetric injury, although these are less common. The main types of fistulas involve the urinary tract and the vagina – most commonly vesicovaginal¹. Patients with a vesicovaginal fistula typically present with leakage of urine or incontinence from early in the post-operative period, although can present several weeks after surgery. A vesicovaginal fistula results in significant morbidity for the patient.

Conservative management, including prolonged catheterisation and antibiotics, may play a role in the management of smaller lesions, however surgical repair is the mainstay of treatment. Both the abdominal and vaginal approach to vesicovaginal fistula repair can be used, including laparoscopic and robotic assisted repair. The abdominal approach is preferred where a previous repair has failed, the fistula is large, or involves the ureter or where there is vaginal stenosis.

The principles of surgical repair of vesicovaginal fistulas remain the same irrespective of the surgical approach. The fistula tract is identified followed by dissection of the plane between the bladder and the vagina with wide mobilisation of the tissue. The bladder and vagina are closed in layers without tension. A vascularised tissue flap can be placed between the bladder and vagina to reduce reformation of the fistula during healing.

Most data regarding fistula repair is derived from case series and retrospective case studies. Numerous reports of laparoscopic and robot assisted surgical repair have shown that these techniques can

be used with efficacy and safety in experienced hands². The benefits of minimally invasive surgery can include a more precise repair, quicker recovery with shorter hospital stay, and reduced post-operative infective morbidity, balanced against the high degree of laparoscopic skill required, steep learning curve and longer operation time.

This video demonstrates the principles of minimally invasive vesicovaginal fistula reconstructive surgery. The patient is a forty seven year old female who presented for review of urge incontinence. Examination demonstrated pooling of urine in the vagina and flexible cystoscopy confirmed the presence of a vesicovaginal fistula at the trigone. She had previously undergone an abdominal hysterectomy five years earlier, with marked incontinence and nocturnal enuresis immediately following the procedure. Her symptoms had improved slightly with pelvic floor exercises however she continued to have insensible urinary incontinence and recurrent urinary infections.

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Friday 16 August / Session 3 / 1415-1425

CYSTOCELE RECURRENCE FOLLOWING LAPAROSCOPIC SACROCOLPOPEXY: HOW LOW DOES THE MESH GO?

Wong V, Guzman Rojas V, Choi S, Shek C, Chou D, Moore K, Dietz HP

OBJECTIVES: Laparoscopic sacrocolpopexy is increasingly seen as an effective treatment option in patients with complex anterior and apical prolapse. The aims of our study were to document anterior and central compartment support and location of the anterior mesh after laparoscopic sacrocolpopexy and to investigate the relationship between the two.

METHODS: This was an external audit of 100 patients after laparoscopic sacrocolpopexy. All had a standardised interview, clinical prolapse assessment (ICS POPQ) and transperineal ultrasound with GE Voluson 730 Expert or S6 systems. Recurrence was defined as either recurrent symptoms of prolapse, point Ba \geq -1, or bladder descent \geq 10mm below symphysis pubis on transperineal ultrasound. Mesh was identified in the three orthogonal planes at rest and on maximum valsalva. Mesh mobility was assessed with the formula $\sqrt{[(X_{\text{Valsalva}} - X_{\text{rest}})^2 + (Y_{\text{Valsalva}} - Y_{\text{rest}})^2]}$.

RESULTS: Mean follow-up interval was 3.06 yrs (0.13-6.87). Thirty-one patients reported recurrent symptoms of prolapse. There were 84 patients with clinical prolapse recurrence; 60 in the anterior and 47 in the posterior compartment, but none apically. Mesh could be identified in 60 patients. Its lowermost aspect was located on average 26 mm (SD 13) from the

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bladder neck at rest and 48 mm (SD 25) on Valsalva. Lowest mesh position and mesh mobility on Valsalva were associated with recurrent cystocele. For every mm of distance from the bladder neck on Valsalva, the likelihood of cystocele recurrence was increased by 6-7% ($P=0.001$).

CONCLUSIONS: Cystocele recurrence following laparoscopic sacrocolpopexy is common, and it seems that such recurrence is related to mesh position and mobility. The lower the mesh reaches towards the bladder neck, the lower is the likelihood of anterior compartment recurrence. It may therefore be beneficial to develop techniques that reliably extend sacrocolpopexy mesh to the bladder base.

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Friday 16 August / Session 3 / 1425-1435

RELIEF OF URINARY SYMPTOMS AFTER PUDENDAL NERVE RELEASE: A CASE REPORT

Chow JSW, Loeffler A, Jarvis SK, Vancaillie TG

Urinary frequency is not considered an essential criterion for the diagnosis of pudendal nerve entrapment, but it is also not exclusive of the diagnosis¹. Decompression of the entrapped pudendal nerve can improve pain in the distribution of the pudendal nerve². There is little evidence describing the diagnosis or management of pudendal nerve entrapment for urinary symptoms³. We describe the investigation and management of a 43 year old woman who suffers vaginal and urinary symptoms for 11 years, and her response to treatment following pudendal nerve decompression.

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Friday 16 August / Session 3 / 1435-1445

MINIARC MONARC SUBURETHRAL SLING IN WOMEN WITH STRESS URINARY INCONTINENCE – AN RCT – 12M FOLLOW UP

Lee J, Rosamilia A, Dwyer P, Lim Y, Thomas E, Murray C, Fitzgerald E, Leitch A, Polyakov A, Schierlitz L

OBJECTIVE: to evaluate and compare objective, subjective and functional outcomes after Miniarc or Monarc suburethral sling in women with stress urinary incontinence (SUI) at 6m & 12m.

BACKGROUND: Midurethral slings (MUS) had become the most common surgery for women with SUI. Single incision slings, such as Miniarc, were introduced to reduce post operative pain, and improve recovery.

METHODS: Women who had SUI or urodynamic stress incontinence (USI) were randomised, in a 1:1 ratio, to receive either Miniarc or Monarc. Women with intrinsic sphincter deficiency, previous MUS, untreated detrusor overactivity or significant voiding dysfunction were excluded. Assuming an objective cure rate of 85% for Monarc, this RCT was powered (80%) to detect a clinical difference of 15%, and allows for an attrition of 15% with a sample size of 220, using a one sided of a 0.05. Computer generated random allocation was concealed and stratified to centre. Surgeons or patients were not blinded once allocation was revealed. Patients were seen at 6w, 6m and 12m with a clinical examination. Standardised proformas together with validated tools, including ICIQ UI SF, ICIQ OAB, PISQ12, IIQ7, PGII and 24 pad weigh, were used to facilitate prospective collection of data to evaluate objective and subjective outcomes following surgery. Objective cure was defined as negative urodynamic stress or cough stress test (CST) at follow up. Subjective cure was defined as absence of patient reported SUI at follow up. Surgeries were performed, according to manufacturer's instructions, by surgeons had already performed at least 10 Miniarc, which was tensioned to snug. Urodynamic studies were performed pre operatively and 6m post operatively. Definitions, outcome measures and standardised reporting adhered to IUGA/ICS terminology, IUGA & CONSORT guidelines. Institution ethics approval was obtained and the trial was registered with the ANZCTR (ACTRN12608000624381). Outcomes were compared with Pearson χ^2 or Fischer Exact test for categorical data and Student t test or Wilcoxon rank-sum for continuous data as appropriate.

RESULTS: 282 women were assessed for eligibility, of which 42 declined participation, 2 indicated a preference to Miniarc (refused randomisation), and 13 were excluded post randomisation (3 did not meet criteria, 9 withdrawn from surgery, 1 unfit). 225 women aged 31-81 (52.9 ± 9.9) received Miniarc (112) or Monarc (113). Median parity was 2 (0-6), mean BMI 27.8 ± 5.8 (15 – 46). Baseline characteristics were balanced between groups. Monarc patients reported more symptom severity on PGI-S at baseline. No statistically significant difference in the subjective (absence of SUI) or objective (absence of USI or CST) cure rates between Miniarc and Monarc at 6m and 12m. Within both Miniarc and Monarc groups, there was a statistically significant improvement at 6m and 12m for ICIQ UI, ICIQ OAB, PISQ12, IIQ7, PGII scores and 24h

pad weigh (6m). At 12m the miniarc arm has a lower proportion using antimuscarinics. At latest follow up, 3 in Miniarc and 2 in Monarc group underwent repeat surgery for SUI (TVT). In the Monarc group, women who had failure subjectively or objectively has a statistically lower mesh compression compared to Monarc success. There was 7 reported groin pain (not bothersome) and 3 detected paraurethral prominence (asymptomatic) in the Monarc arm, but none in the Miniarc arm. There were no sling divisions in both arms. There as a single case of mesh exposure (7mm, excised) in a patient who underwent concurrent anterior compartment mesh repair.

CONCLUSIONS: Early results suggest comparable cure rates between monarc and miniarc. Longer follow is planned to evaluate if the comparable cure rates between both arms, lower proportional use of antimuscarinic in miniarc arm at 12m will persist.

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Friday 16 August / Session 3 / 1445-1455

OUTCOMES OF PATIENTS WHO DECLINED RANDOMISATION TO MINIARC VERSUS MONARC: A RETROSPECTIVE STUDY

Young N, Rosamilia A, Lee J

OBJECTIVE: To compare baseline characteristics and outcomes of trial participants with women who declined to enter the trial. To explore reasons why women declined participation.

METHODS: This study is a retrospective analysis of patients previously identified as eligible and had declined randomisation to MiniMo RCT. Eligible patients referred to Monash Health and Mercy Health between 2009 and 2011 with SUI or urodynamic stress incontinence. Women with intrinsic sphincter deficiency, previous midurethral slings, untreated detrusor overactivity or significant voiding dysfunction where excluded. Objective cure was defined as no leakage of urine while coughing. Subjective cure was defined as absence of patient reported SUI at follow up. Patients were interviewed using validated questionnaires via phone at a variable time frame (ICIQ UI SF, ICIQ OAB, IIQ7 and PGI-I). Outcomes were compared using chi-square statistics.

RESULTS: 112 women were randomised to Miniarc, 113 to Monarc and 44 were eligible and declined. 15 had Miniarc, 22 Monarc, 3 had an inside out Transobturator Tape and 4 TVT. There were similar baseline characteristics and non-significant subjective cure rate and objective cure at 6 months. The 12 month subjective cure rate in women who declined was significantly lower 60% (18/30) compared with 83% in Miniarc and 91.8% in the Monarc ($p=0.0001$). The complication rate was 30% ($n=8/26$) using IUGA standardised reporting. There was one intra-operative complication reported, vaginal perforation during a Monarc insertion (2AT1S3). One patient who underwent a TVT sling had urinary retention requiring sling

division and IDC for 21 days (4BT2S1). One mesh exposure was discovered at 6 weeks (Monarc) treated by re-suturing of the vagina (3AT2S3). There was one patient with a displaced miniarc arm who complained of severe vaginal pain and later required removal of mesh at 1 year and developed severe incontinence requiring a repeat continence operation (pubovaginal sling)(6BT4S2). There were 3 people who complained of persistent groin pain at follow-up (6BT3S4).

The commonest reason for decline was too much follow up in 67% and preference to procedure in 12%.

CONCLUSIONS: There is a statistically lower subjective cure rate at 12 months in the declined group. This may be due to information bias as data was not collected in the same way. The most common reason for declining randomisation was inability to comply with additional appointments this knowledge can be used in counselling for recruitment to RCTs.

AMS Research Grant was given for MiniMo RCT

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Friday 16 August / Session 3 / 1455-1505

ENDOSTITCH WITH V-LOC SUTURES FOR PELVIC FLOOR REPAIRS

McMaster-Fay R

Laparoscopic vaginal vault suspension including suturing of para-rectal tissues has as good results as mesh sacro-colpopexy without the same risk of morbidity and mortality.

I have been using this technique using the EndoStitch with non-dissolvable polyester sutures for 13 years and presented my first 100 cases at the AGES ASM in Adelaide in 2006. I have now performed over 200 of these procedures.

Covidien introduced the V-Loc dissolvable barbed sutures for wound closure around 2010. These revolutionary sutures do not require knot tying to fix them.

I have used the new V-Lock dissolving sutures to close the vaginal vault at laparoscopic hysterectomy but I usually perform all intra-corporeal suturing with the EndoStitch.

It was with great excitement that was informed by Covidien that they have now released the V-Loc sutures for the EndoStitch and in both dissolvable and non-dissolvable forms.

I now use the dissolvable V-Loc sutures to close the vaginal vault at laparoscopic hysterectomy and the non-dissolvable to perform laparoscopic pelvic floor repairs.

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These V-Loc sutures are much easier and faster to use and I can commend them.

I will present my initial cases and look forward to present the long term results of their use in the future.

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Friday 16 August / Session 3 / 1505-1515

GROIN PAIN COMPLICATING THE TVT-O PROCEDURE: AN ULTRASOUND EVALUATION OF THE ANATOMICAL LOCATION OF THE TVT-O TAPE IN RELATION TO THE OBTURATOR NEUROVASCULAR BUNDLE

Al-Salihi S, Daborn JP, Lim J, Carey M

OBJECTIVES: The aim of this study was to use ultrasound assessment of the post operative TVT-O tape placement to establish if the closer proximity of the tape to the Obturator neurovascular bundle is associated with increased incidence of groin pain.

BACKGROUND: Number of studies in the literature have reported variable incidence of persistent groin pain following TVT-O placement for urinary incontinence. One study suggested the rate of up to 24% of patient complaining of groin pain at 6 months post operatively (1). In the majority of cases it can be self-limiting, but up to 1% of cases will be persisting and requiring surgical removal of the tape due to the resulting groin pain (2). On the other hand, different cadaver studies suggested that the TVT-O tape lies more proximal to the Obturator neurovascular bundle when compared to the TOT tapes (3). That perhaps lent further support to the impression that there is less incidence of groin pain with TOT compared to TVT-O. Therefore, there was the drawn out conclusion we made, that the closer the tape to the OBNVB is placed the more is the incidence of groin pain. The ability to visualize the tape using a perineal two-dimensional ultrasound meant that we could use a non-invasive investigative tool to test this hypothesis.

METHODS: This is a comparative prospective observational study. Patients screened to be in the study and estimated sample size were based on the previous study conducted at the unit suggesting the rate of 24% of groin pain at 6 months after TVT-O procedures. 132 patients screened to obtain 33 patients expected to have groin pain from the procedure. Another 33 pain free patients were recruited as controls. The sample size calculation was performed using the Gebiski VJ, Dobson AJ model with assumed power calculation of 80% and a p-value of <0.05.

The primary outcome measure was to correlate the presence of pain with the placement of the TVT-O tape within 15mm of the obturator neurovascular bundle. While the secondary outcome measures were to assess the anatomical variability of the tape placement including left versus right side placement, as well as other patients factors like age and BMI.

A standardized ultrasound technique and strict imaging criteria were used to ensure uniformity of the Ultrasound images used in the study.

RESULTS: No pain Group: Median age of 54 ranges between 40-77y.o. Distance at the right side ranges between 7.5mm to 31mm 11 patients (39%) had the measurements at 15mm or less between the tape and the NVB. Distances on the left side ranges between 8-42mm with 6 patients (21%) had the distance at 15mm or less. Patients' satisfaction measured using visual analogue score showed that only two out of the 28 patients (7%) in the no pain group scored below 80% the rest scored at 90% and up as a measure to there general satisfaction of the procedure. The scan was done on an average 65 days after the procedure.

In the pain group there was 23 patients recruited. The ultrasound was done on an average of 82 days after the procedure in this group. Average age was 52 ranges between (34-76y.o). On the right side 8 patients (34%) scored pain as 0 on a scale between 0-10 (0= no pain and 10= the worst pain ever experienced) the rest had pain ranged between 2-9. Patients with no pain on the right the measured distance on the corresponding side were all over 15mm apart from one.

CONCLUSIONS: In this study, it appears that there is no significant association between how close the tapes are to the neurovascular bundle and the occurrence of pain post TVT-O procedures.

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A NOVEL MANAGEMENT FOR VAGINAL ATROPHY – PLATELET RICH PLASMA

Behnia-Willison F, Miller B, O'Shea R, Naidoo R

AIMS: To evaluate autologous platelet rich plasma (PRP) as a treatment of vaginal atrophy in post-menopausal patients.

BACKGROUND: Platelet-rich plasma (PRP) is an autologous concentration of human platelets in a small volume of plasma. Because it is a concentration of platelets, it is rich in protein growth factors secreted by platelets. The use of platelet rich plasma solutions in wound healing has been studied in plastic and reconstructive surgery and sports medicine previously and been shown to improve outcomes in tissue repair^{1,2}. PRP has been evaluated along with CO₂ laser and shown to have an effect on vaginal atrophy³.

METHODS: Women who suffered vaginal atrophy were treated in a single private gynaecology practice in Adelaide. A short animation will be shown to illustrate the process. Lignocaine gel is applied topically to the vagina for 10 minutes. During this time blood is collected into specially prepared test tubes that are designed to activate the platelets. The blood is centrifuged to concentrate platelet rich plasma. A specially designed speculum is used to place multiple injections in the lower 2/3 of the vagina with the prepared PRP. Women undergo three treatments spaced one month apart.

RESULTS: Of an initial 14 women who were not able to be sexually active prior to treatment because of severe atrophy 11 were able to resume sexual activity. Out of a further 4 women who were treated with PRP and the Monalisa Touch™, (a fractional vaginal CO₂ laser), all four were able to resume normal sexual activity.

DISCUSSION: These initial results provide the incentive for further study. A more detailed pilot study has now been commenced looking at postmenopausal women with vaginal atrophy. The following items will be reviewed before and after treatment: Rates of dyspareunia, vaginal pH, vaginal cytology (maturation index), the Australian pelvic floor questionnaire, vaginal exam (looking for conization, absent rugae, petechiae and friability of the vaginal wall), and side effects to treatment. This will aid in power calculations and planning for a randomized controlled trial using normal saline injections as a comparator.

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A CASE-NOTES REVIEW OF TREATMENTS OF VAGINAL MESH EXPOSURE

Behnia-Willison F, O'Shea R, Miller B, Seman E

OBJECTIVE: To present our experience of treating vaginal mesh exposure with various modalities including Platelet Rich Plasma¹ (PRP) and Surgisis².

STUDY DESIGN: A case-notes review was performed of 20 patients (IUGA/ICS Classifications 3 2AT2S1 to 3AT3S2) who were referred for treatment of symptomatic mesh exposure from 2009 to 2012 across two gynaecology practices.

BACKGROUND: Mesh exposure is a common (up to 10%) side effect of vaginal mesh surgery. While a proportion of women respond to topical oestrogen treatment more often surgical excision is required. Platelet rich plasma is a treatment used in the treatment of tissue damage in both the sports medicine and the plastic surgery fields. The growth factors release by activated platelets may aid tissue healing.

Surgisis (Cook Surgical, Bloomington IN) is a biological graft extracted from porcine small intestinal submucosa. In comparison to porcine dermal grafts surgisis has a higher collagen content, is acellular and not cross-linked enabling graft resorption and replacement by host connective tissue.

RESULTS: Four women responded to long term, (3 to 6 months), ovestin cream treatment. Two women who refused oestrogen treatment because of previous breast cancer were treated with PRP with complete resolution.

Fourteen women underwent surgical excision and primary closure, nine needing no further surgery after six months.

Of the five who required repeat surgery, one presented with severe vaginal atrophy and adhesions with stenosis after anterior and posterior Elevate mesh repair. Vaginal atrophy responded poorly to three months of topical oestrogens. Vaginal stenosis was corrected by adhesiolysis, partial removal of the mesh, and surgisis placement over the vaginal epithelial defect and the remaining mesh. A vaginal support device was inserted and removed after two weeks due to discomfort. Recurrent adhesions were noted at six weeks and treated with PRP for three months then repeat adhesiolysis. Sexual activity resumed six weeks later and no further adhesions were noted at three months.

One woman referred with chronic exposure of anterior Prolift associated with malodorous vaginal discharge, pelvic pain and dyspareunia. Three previous local excisions had been ineffective. She was treated successfully by excision of the entire anterior vaginal wall with underlying prosthesis and adjacent arms and cover of the defect with surgisis graft. By 12 weeks her pain and discharge settled and pain-free coitus resumed.

One woman had chronic vaginal discharge and pelvic pain related to anterior fornix exposure of Elevate, and low posterior exposure of ProSima. Excision of exposed mesh was associated with bleeding around right uterosacral ligament. Primary closure was without tension. Minor recurrence of anterior fornix exposure occurred at six

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weeks, but pain and discharge greatly improved. Long term topical oestrogen was prescribed. Follow-up is ongoing and she may still need repeat surgery.

CONCLUSION: The treatment of symptomatic vaginal mesh exposure is straightforward in most cases. In recurrent cases, treatment can be challenging and multiple modalities may be required. Platelet rich plasma and surgisis grafts may be of benefit in women whose mesh exposure is associated with severe atrophy or where large areas of vaginal epithelium need removal.

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LAPAROSCOPIC MANAGEMENT OF OVARIAN ECTOPIC PREGNANCY

Harris A, Nikam Y

Ovarian ectopic pregnancy is rare. It constitutes only 0.5-3% of all ectopic pregnancies. The incidence is only 1 for every 7000-40000 deliveries. Ectopic pregnancy including ovarian ectopic can be a life-threatening condition if it ruptures, leading to haemoperitoneum and hypovolemic shock. Associations have been reported with in vitro fertilization, and contraceptive intrauterine device.

Early diagnosis of this rare entity has been made possible by the availability of sensitive and specific radioimmunoassays for human chorionic gonadotropin, high resolution transvaginal ultrasonography, and laparoscopy. The classical management for ovarian ectopic pregnancies has been surgical. Small lesions have been treated by ovarian wedge resection or cystectomy. Larger lesions have usually required oophorectomy.

A 24 year old G3P1 woman 6 weeks pregnant by LMP presented with a three day history of PV bleeding and lower abdominal pain.

Her Bhcg was 4340, and a pelvic ultrasound reports: an empty uterine cavity, a heterogeneous, echogenic 6.2cm mass in the expected position of the left ovary, suspicious of Left adnexal ectopic. Echogenic fluid suggestive of blood seen in the POD. This presentation will include a video on the laparoscopic findings of the left ovarian mass, and the surgical management (left partial oophorectomy). Histopathology of the mass and left ovarian tissue has confirmed a left ovarian ectopic.

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RUDIMENTARY HORN PREGNANCY DIAGNOSED BY ULTRASOUND AND TREATED BY LAPAROSCOPY - A CASE REPORT AND REVIEW OF THE LITERATURE

Berkowitz E, Molnar R, Bustan M, Kadan Y, Romano S

Pregnancy in a rudimentary horn occurs once in 76,000 pregnancies. The most significant threat of pregnancy in a rudimentary horn is the risk of rupture. With the use of ultrasound the diagnosis can be made before symptoms occur. Management usually consists of excision of the rudimentary horn with the pregnancy and the ipsilateral tube, traditionally by laparotomy. We present a case of an 11-week pregnancy in a rudimentary horn with a nonviable fetus diagnosed by ultrasound and treated with laparoscopic resection. Review of the literature revealed 11 cases treated successfully with laparoscopic surgery. Laparoscopic treatment should be considered for pregnancy in rudimentary horn during the first trimester.

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DISCONNECTED: A CASE OF TUBO-UTERINE FISTULA

Berkemeier S, Chang T

CASE PRESENTATION: A tubo-uterine fistula is rare finding that may be a cause of infertility and recurrent pregnancy.

We present a case of a 35 year old healthy female, G6P2, who presented with a history of recurrent early pregnancy loss and 12 months of secondary infertility. Investigations revealed a hydrosalpinx of the right tube, with the distal end adhered to the uterine fundus forming a fistula with the uterine cavity. Repair of the fistula was performed laparoscopically.

The management and possible aetiology of a tubo-uterine fistula will be presented. A video of the hysteroscopic findings and the laparoscopic repair will be shown in conjunction with the case study.

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OEIS COMPLEX – A RARE COMPLICATION OF TWIN PREGNANCY

Maindiratta B, Lim B H, Brothers L

OEIS (Omphalocele Exstrophy Imperforate anus Spina bifida) complex is a rare condition in pregnancy, more so in MCMA twins. We present this rare case and discuss the diagnostic challenges. A 23 year old woman in her 3rd pregnancy with confirmed MCMA twins was diagnosed following a routine ultrasound scan at 16 weeks to have one twin with a low sacral cystic meningocele along with bladder exstrophy and abnormal perineum with a short bifid penis and an amorphous mass replacing the scrotum. There were diagnostic difficulties due to multiple pregnancy and her Body Mass Index of 37. Whilst Magnetic Resonance Imaging was thought to be potentially helpful, her BMI was deemed unsuitable for the examination. Further specialized ultrasound scans showed a pelvic cystic lesion possibly dilated renal pelvis with crossed fused renal ectopia. The spectrum of anomalies were thought to be part of OEIS complex. Due to increasing polyhydramnios, the twins were delivered at 32 weeks by Caesarean section after fetal lung maturation with corticosteroids. Twin 2 was noted to be normal at birth but twin 1 was confirmed to have bladder exstrophy, completely bifid penis, imperforate anus with rectovesical fistula and omphalocele with a 6 cm diameter abdominal wall defect containing a few intestinal loops in it. Spina bifida with terminal cyst and cord tethering along with cross fused renal ectopia was confirmed by ultrasound. Palliative care was provided and the affected twin survived for 48 hrs. The prognosis of OEIS complex is variable depending on the severity of the structural defects.

KEY WORDS: OEIS complex, Monochorionic monoamniotic (MCMA) twins, omphalocele, bladder exstrophy, Imperforate anus, omphalocele.

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OVARIAN ECTOPIC PREGNANCY – A CHALLENGING DIAGNOSIS

Maindiratta B, Patel S, Chin G

A 31 year old woman, gravida 4 para 2, presented with an acute abdomen in a haemodynamically unstable condition. Her beta HCG was 2129 IU/L in the setting of 4 weeks amenorrhoea.

At laparotomy, the finding was of an enlarged left ovary with ongoing, significant haemorrhage. This was treated by cystectomy and further haemostatic ovarian sutures. The estimated blood loss was 2.5 litres and intraoperative haemoglobin was 55g/L. She was transfused 3 units of packed red blood cells; a further 2 units of red blood cells transfused during her post-operative admission. The patient was well on day 4 postop and was discharged home.

The histology report confirmed presence of chorionic villi with associated villous and extravillous trophoblast; these products of

conception were embedded in ovarian tissue and also present on the ovarian surface. The intervening stroma was necrotic indicating rupture. The adjacent ovarian stroma contained corpus luteum with central area of organising haemorrhage.

Ovarian pregnancy occurs in 1:7000 pregnancies. It is a rare form of ectopic pregnancy. The incidence of ovarian ectopic pregnancy is rising, being approximately 0.5 to 3% of all ectopic pregnancies.

The pre operative diagnosis of ovarian ectopic pregnancy is still difficult. It is often confused with a ruptured corpus luteum in 75% of cases or mistaken for an ovarian cyst. The recent advances in bHCG determination and transvaginal scanning have been invaluable tools in the diagnosis of this condition. However, in acute presentations such as this case, immediate resuscitation and timely operation may be indicated as a priority over ultrasound diagnosis.

KEY WORDS: Ovarian ectopic pregnancy, ectopic pregnancy.

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ROBOTIC SACRAL COLPOPEXY AND OOPHEROPEXY

Al-Salihi S, Carey M

OVERVIEW: This video demonstrates robotic surgery to treat vaginal vault prolapse and residual ovary syndrome.

Sacrocolpopexy and oopheropexy is demonstrated involving clinical details:

A 46-year-old para three referred with recurrent prolapse, urinary incontinence, voiding difficulty, obstructive defecation, chronic pelvic pain and dyspareunia. She had undergone a prior vaginal hysterectomy, vaginal repair, and Monarc midurethral tape in 2005. She also undergone laparoscopy. Examination revealed stage three pelvic organ prolapse (Ba +2, C 0, Bp 0, Gh 4, TVL 8). There was right side vault tenderness on bimanual examination. Urodynamic test demonstrated over active bladder and obstructed voiding difficulty.

A vaginal pessary fitted and prescribed Enablex (Darifenacin). This resulted in 50% improvement in her urinary leakage yet persisted pelvic pain. Patient requested surgery. She elected to undergo robotic sacrocolpopexy, management of possible residual ovary syndrome, posterior vaginal wall repair and cystoscopy.

MRI and CT IVP were undertaken prior to surgery and they were normal.

SURGICAL DETAILS: Surgery performed on April 2013. A Hasson entry was used. Additional ports placed under direct vision. The Da Vinci Robot was docked (docking time was under 7minutes). Intraabdominal adhesions were dissected. The right ovary noted to adhere to the vaginal apex. It was dissected from the vaginal vault and repositioned above the pelvic brim.

The bladder and rectum dissected of the vagina. The peritoneum dissected from the sacral promontory to the Cul de sac. Y-sapped ultrapro mesh was sutured to anterior and posterior vaginal walls and apex. The tale of the mesh was sutured to the anterior longitudinal

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ligament at the sacrum. Using the V-loc suture the peritoneum closed over the mesh. Intercede was positioned over the peritoneal closure.

A distended mega rectum was identified that was considered to be the cause for the patient's defecatory difficulty and a posterior repair was not performed. Cystoscopy was normal. The surgical time was 87 minutes including the docking time.

OUTCOME: At surgical review there was excellent vaginal support with no recurrent prolapse. Her pelvic pain had resolved she was referred to a colorectal surgeon for her rectal dilatation. Interestingly her son reported undergoing surgery for rectal prolapse at the age of 18 months.

DISCUSSION: Sacrocolpopexy is considered the gold standard operation for the vault prolapse particularly in younger patients (1). Advances in surgery have seen the sacrocolpopexy procedure progressed from laparotomy to laparoscopy and recently robotic surgery. The main advantage of the robotic surgery includes 3D vision and, when compared to straight stick surgery, superior surgical dexterity (2). However, robotic surgery is more expensive.

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CONFERENCE INFORMATION AND CONDITIONS

DEPOSITS AND FINAL PAYMENTS:

All Conference costs are payable in advance. If, for any reason, your entire payment has not been received by the due date, we reserve the right to treat your booking as cancelled and will apply the appropriate cancellation fees. Faxed or posted registration forms will only be processed/confirmed if valid credit card details or cheque payment accompany the forms. You may not pay your fees by Electronic Funds Transfer.

CANCELLATION AND REFUND POLICY:

Should you or a member of your party be forced to cancel, you should advise the Conference Organisers in writing addressed to 'AGES c/- Conference Connection, 282 Edinburgh Road Castlecrag NSW Australia 2068.'

Single Meeting Registrations: the Conference cancellation policy allows a cancellation fee of AU\$250.00 of registration fees for cancellations received up to 8 weeks prior to the first day of the Conference, and of 50% of registration fees for cancellations up to 4 weeks prior to the first day of the Conference. No refund will be made after this time.

Multiple meeting registrants: no refunds apply.

Hotels and other suppliers of services, depending on date of cancellation, may also impose cancellation charges. Accommodation payments will be forfeited if the room is not occupied on the requested check-in date. Please note that a claim for reimbursement of cancellation charges may fall within the terms of travel insurance you effect.

The Conference Organisers reserve the right to cancel any workshop or course if there are insufficient registrations. Also, at any time, without notice and without giving reasons, the Conference Organisers may cancel or postpone the Conference, change the venue or any published timetables, activities, presenters or particulars without being liable for any loss, damage or expense incurred or suffered by any person. Refunds of the whole or any part of the fees and payments received by the Conference Organisers will only be made if the Conference Organisers in the exercise of their absolute discretion, determine that persons have been unfairly prejudiced by any cancellation, postponement or change.

INSURANCE:

Registration fees do not include insurance of any kind. It is strongly recommended that at the time you register for the Conference and book your travel you take out an insurance policy of your choice. The policy should include loss of fees/deposit through cancellation of your participation in the Conference, or through cancellation of the Conference, loss of international/domestic air fares through cancellation for any reason, loss of tour monies through cancellation for any reason including airline or related services strikes within and/or outside Australia, failure to utilise tours or pre-booked arrangements due to airline delay, force majeure or any other reason, medical expenses (including sickness and accident cover), loss or damage to personal property, additional expenses and repatriation should travel arrangements have to be altered. The Conference Organisers cannot take any responsibility for any participant failing to arrange his/her own insurance. This insurance is to be purchased in your country of origin.

PRICING POLICY:

It is impossible to predict increases to cost elements such as government taxes and other service provider tariffs. In the event of such fluctuations or increases affecting the price of the Conference, we reserve the right to adjust our prices as may be necessary at any time up to and including the first date of the Conference, even though the balance payment may have been made.

If we are forced to change your booking or any part of it for any reason beyond our control – for instance, if an airline changes its schedule – we reserve the right to vary your itinerary and will give you, or cause to be given to you, prompt notice thereof. Conference Costs do not include: insurance, telephone calls, laundry, food and beverage except as itemised in the brochure, and items of a personal nature.

TRAVEL AND ACCOMMODATION:

The Conference Organisers are not themselves carriers or hoteliers nor do we own aircraft, hotels, or coaches. The flights, coach journeys, other travel and hotel accommodation herein are provided by reputable carriers and hoteliers on their own conditions. It is important to note, therefore, that all bookings with the Conference Organisers are subject to terms and conditions and limitations of liability imposed by hoteliers and other service providers whose services we utilise, some of which limit or exclude liability in respect of death, personal injury, delay and loss or damage to baggage.

OUR RESPONSIBILITY:

The Conference Organisers cannot accept any liability of whatever nature for the acts, omissions or default, whether negligent or otherwise of those airlines, coach operators, shipping companies, hoteliers, or other persons providing services in connection with the Conference pursuant to a contract between themselves and yourself (which may be evidenced in writing by the issue of a ticket, voucher, coupon or the like) and over whom we have no direct and exclusive control.

The Conference Organisers do not accept any liability in contract or in tort (actionable wrong) for any injury, damage, loss, delay, additional expense or inconvenience caused directly or indirectly by force majeure or other events which are beyond our control, or which are not preventable by reasonable diligence on our part including but not limited to war, civil disturbance, fire, floods, unusually severe weather, acts of God, act of government or any authorities, accidents to or failure of machinery or equipment or industrial action (whether or not involving our employees and even though such action may be settled by acceding to the demands of a labour group). Please note that add prices quoted are subject to change without notice.

PRIVACY:

Collection, maintenance and disclosure of certain personal information are governed by Australian legislation. Please note that your details may be disclosed to the parties mentioned in this brochure and your details may be included in the list of delegates.

ENTRY TO AUSTRALIA:

All participants from countries outside Australia are responsible for complying with Australian visa and entry requirements and re-entry permits to their own countries. Letters to support visa applications will be sent upon request, but only after receipt of registration forms and fees.

CONFERENCE BADGES:

Official name badges must be worn or produced on demand at all times during the Conference to obtain entry to all Conference sessions and to social functions. Proof of identity will be required for the issue of replacement badges.

THE CONFERENCE ORGANISERS:

References to 'the Conference Organisers' in the above Conference Information and Conditions mean Australasian Gynaecological Endoscopy and Surgery Society Limited ACN 075 573 367 and Michele Bender Pty Limited ACN 003 402 328 trading as Conference Connection, and if the context requires, each of them severally.