

Obstetric Trauma
Pelvic Floor Repair
Surgical Essentials

International
Faculty
Dr John Miklos USA
Dr Robert Moore USA
Prof Peter Lotze
USA

3 & 4 June
2011
Adelaide Convention
Centre
South Australia

AGES
Pelvic Floor
Workshops
2 June 2011

AGES Medico-Legal Workshop 5 June 2011

Program and Abstracts

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Workshops - Thursday 2 June

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AGES Medico-Legal Workshop 6 PR&CRM

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AGES Pelvic Floor Symposium & Workshop XII 2011 AGES Medico-legal Workshop qualifies for 4 Interactive Risk Management Points from MIGA. Daily signature of the attendance roll is required for eligibility. Members of MIGA should apply for points to MIGA by 31 March 2012.

Obstetric Trauma Pelvic Floor Repair Surgical Essentials

Contents

CPD ana PR&CRM Points	Inside Cover
Faculty, Board and Committee Members	2
Welcome Message	3
Conference Program	
Friday 3 June	4
Saturday 3 June	5-6
Program Abstracts	
Friday 3 June	7
Saturday 3 June	11
Free Communications: Session A	17
Free Communications: Session B	23
Free Communications: Session C	27
Notes	31
Information & Conditions Insid	e Back Cover
Future AGES Meetings	Back Cover



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to Obstetric Trauma Pelvic Floor Repair Surgical Essentials

Pelvic Floor Symposium & Workshop XII

Conference Program

0730-0800 Conference Registration

0800-0815 Conference Opening and Welcome

J Tsaltas, M McEvoy

0815-0915 SESSION 1

Sponsored by Stryker

Uterine Preservation in Prolapse

Surgery

Chairs: J Tsaltas, M McEvoy

0815-0845 Uterine preservation -

the Atlanta approach

R Moore

0845-0915 Panel discussion

Panel: R Moore, A Lam, P Maher,

G Cario, P Lotze, A Rane

0915-1230 SESSION 2

Sponsored by Stryker

Live Surgery

Direct telecast from Flinders Private Hospital

Chairs: P Maher, J Abbott

Expert commentary panel: R Moore, J Tsaltas, A Lam, A Rane, P Maher, J Abbott, G Cario

Laparoscopic sacral hysteropexy

J Miklos, F Behnia-Willison

Prosima with hysteropexy M Carev

Anterior elevate A Rosamilia

Surgisis posterior repair with Capio

sacrospinous fixation E Seman

1000-1030 Morning Tea and Trade Exhibition during live surgery

SESSION 2 cont.

Sponsored by Stryker

Live Surgery

Direct Telecast from Flinders Private Hospital

1230-1330 Lunch and Trade Exhibition

1330-1530 SESSION 3

Sponsored by Johnson & Johnson Medical Fertility Preservation in POP Surgery

Chairs: A Yazdani, A Rosamilia, E Lombardi

1330-1350 Laparoscopic mesh hysteropexy Alam

1350-1410 Laparoscopic suture hysteropexy E Seman

1410-1430 Vaginal uterosacral/sacrospinous

hysteropexy P Lotze

1430-1440 Panel discussion

1440-1500 Manchester repair revisited:

obsolescence or a uterine sparing alternative? M McEvoy

1500-1520 Vaginal mesh hysteropexy J Miklos

1520-1530 Panel discussion

1530-1600 Afternoon Tea and Trade Exhibition

1600-1730 SESSION 4

Sponsored by Johnson & Johnson Medical

Pregnancy & Prolapse /

Urinary Incontinence Chairs: K Jansen, A Rane, F Behnia-Willison

1600-1620 Pessaries before, during and after pregnancy

K Moore

1620-1640 Pregnancy after continence surgery

A Rosamilia

1640-1700 Pregnancy after pelvic floor repair

M Carev

1700-1730 Panel discussion

1900 for 1930

Gala Dinner

National Wine Centre of Australia Corner of Botanic and Hackney Roads, Adelaide.

Please assemble in the foyer of the



0800-1030 SESSION 5

Sponsored by Karl Storz Endoscopy Obstetric Trauma

Chairs: H Merkur, S Salfinger, C Lam

0800-0825 Management of 3rd and 4th degree tears S Scroggs

0825-0850 Dynamic episiotomy and labial reconstruction

A Rane

0850-0910 Anatomy & imaging of levator trauma J Lee

0910-0930 Postnatal voiding dysfunction P Lotze

0930-0950 What physiotherapy can offer P Neumann

0950-1010 Assessment of anal sphincter function and delayed anal sphincter repair

D Wattchow

1010-1030 Panel discussion

1030-1100 Morning Tea and Trade Exhibition

1100-1250 SESSION 6

Sponsored by Boston Scientific Lower Urinary Tract Pathology Chairs: A Lam, K Harrison, N Bedford

1100-1130 Cystoscopy and troublesome LUT problems P I otze

1130-1150 Surveillance cystoscopy & cystotomy repair R O'Shea

1150-1210 Laparoscopic repair of vesicovaginal fistula J Miklos

1210-1230 Vaginal closure of lower genitourinary tract fistua J Goh

1230-1250 Panel discussion

1250-1350 Lunch and Trade Exhibition

1350-1500 SESSION 7

Free Communications A Sponsored by Stryker Apex & Base Hall K Chairs: M McEvoy, R O'Shea

1350-1400 Laparoscopic mesh sacrocolpopexy: 6-year outcomes at CARE, Sydney

Patel PS, Dunkley EJC, Lam A

1400-1410 Six-year review of pelvic floor repairs in an established endosurgery unit: the emergence of the laparoscopic sacrocolpopexy Fleming T, Cario G, Chou G, Rosen D, Cooper M, Reid G, Aust T, Reyftmann L

1410-1420 Functional outcomes for surgical revision of synthetic slings performed for voiding dysfunction. Agnew G, Dwyer PL, Rosamilia A, Edwards G, Lee JK

1420-1430 Comparative outcomes from prolift mesh and bilateral sacrospinous colpopexy for posterior compartment prolapse McEvoy M., Forbes A

1430-1440 Apical compartment prolapse following vaginal mesh repair Short J

1440-1450 Outcomes of surgical revision of synthetic slings for postoperative pain and/or sling extrusion Agnew G, Dwyer PL, Rosamilia A, Edwards G, Lee JK

1450-1500 Pilot study to compare barbed and conventional sutures for fixation of the anterior vaginal portion of mesh in laparoscopic sacrocolpopexy

Aust T, Chou D, Cario G, Rosen D, Reyftmann L, Fleming T, Bertollo N, Walsh W



to Obstetric Trauma Pelvic Floor Repair Surgical Essentials

Pelvic Floor Symposium & Workshop XII

1350-1500	Free	Comm	unicatio	ne R
1330-1300	1166	COMMINICAL	x_{II}	11.5 1)

Sponsored by Stryker **Techniques & Instrumentation** Meeting Room 1 Chairs: C Lam, E Lombardi F Behnia-Willison

- 1350-1400 MiniLap total laparoscopic hysterectomy: a video Lee S, Soo S, Ang C
- 1400-1410 SILS and pelvic floor repair, case presentation and video Behnia-Willison F, Jourabchi A, Hewett P
- 1410-1420 S-Portal vs SILS Single Incision Laparoscopic Hysterectomy - video comparisons Lee S, Soo S, Ang C
- 1420-1430 Z Plasty Vaginal Reconstruction in cases of vaginal constriction: a video presentation Singh R, Carey M
- 1430-1440 Laparoscopic anterior sacrocolpopexy with total laparoscopic hysterectomy and the V Loc Suture for anterior and apical compartment prolapse Cario G, Rosen D, Aust T, Chou D and Reyftmann L
- 1440-1450 Increased endometrial thickness following colpocleisis: a dilemma of diagnosis and treatment Fleming T, Cario G, Chou D, Rosen D, Cooper M, Reid G, Aust T, Reyftmann L
- 1450-1500 Laparoscopic sacrospinous ligament fixation using a retropubic anterior approach

Cario G, Rosen D, Aust T, Chou D, Reyftmann L

1350-1500 Free Communications C

Sponsored by Johnson & Johnson Medical Kits & Complications Meeting Room 2 Chairs: N Bedford, E Seman

- 1350-1400 Prevalence of urinary retention and urinary tract infection in patients with anterior vaginal wall prolapse at Siriraj Hospital Hengrasmee P, Krainit P, Lerasiri P
- 1400-1410 Identifying factors associated with haemorrhage at laparoscopic hysterectomy Burnet S

1410-1420 Elevate mesh repair for pelvic organ prolapse: an update of early results from a single centre Dunkley EJC, Patel PS, Lam A

1420-1430 A prospective study of elevate mesh kit in pelvic floor repair Behnia-Willison F, Foroughinia L, Seman E, Lam C, Bedford N, Jourabchi A, Sarmadi M, O'Shea R

1430-1440 Uterus-sparing prolapse surgery: is laparoscopic repair better than the transvaginal approach? Patel PS, Dunkley EJC, Kaufman Y, Lam A

1440-1450 A comparison of two mesh systems for repair of pelvic organ prolapse Dunkley EJC, Patel PS, Lam A

1450-1500 Outcomes of transvaginal Prolift® mesh repair for pelvic floor prolapse at Patel PS, Dunkley EJC, CARE, Sydney Kaufman Y, Lam A

1530-1730 SESSION 8

Sponsored by American Medical Systems Pearls from the 'Deep South' Chairs: E Seman, R O'Shea, D Chou

1530-1550 Laparoscopic mesh sacral colpopexy J Miklos

1550-1610 Slings - what's new? R Moore

1610-1630 Pelvic sidewall and paravaginal anatomy P Lotze

1630-1650 Laparoscopic neovagina J Miklos

1650-1710 Vaginal rejuvenation & labioplasty R Moore - their place in gynaecology

1710-1730 Panel discussion

1730-1740 Close and award J Tsaltas, M McEvoy



Session 3 / 1330-1350

LAPAROSCOPIC MESH SACROHYSTEROPEXY

Lam A

Hysterectomy is traditionally considered an essential part of the surgical treatment for significant utero-vaginal prolapse. This is most often performed as a vaginal or abdominal procedure, accompanied by some form of level I vault suspension , and where indicated level II or III colporrhaphy. While sacrocolpopepxy has been found to be superior to vaginal sacrospinous colpopexy, there is insufficient evidence to support or refute the traditional view that hysterectomy is integral to successful surgical management of significant utero-vaginal prolapse.

At CARE, we have adopted a 'conservative' approach on the basis that:

- Sacrocolpopexy is associated with a lower rate of vault recurrence and dyspareunia than sacrospinous colpopexy.
- Uterine preservation and hence hysteropexy is associated with a lower rate of mesh-related complications, in particular a lower risk of mesh erosion and infection.
- Laparoscopic sacrocolpopexy is equally successful and is less invasive than abdominal sacrocolpopexy in the hands of experienced surgeons.
- Laparoscopic mesh sacrohysteropexy, in the presence of a normal size uterus, is a reasonable and logical alternative to hysterectomy and sacrocolpopexy in the surgical management of significant utero-vaginal prolapse.

In this presentation, the author will:

- Review the evidence in the literature
- Present the surgical technique(s) of laparoscopic mesh sacrohysterpexy
- Evaluate the results of sacrocolpopexy since 2004 from CARE prospective data base
- Compare laparoscopic and vaginal mesh hysteropexy results
- Draw conclusions to help guide clinical practice in the surgical management of significant utero-vaginal prolapse.

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

Session 3 / 1350-1410

LAPAROSCOPIC SUTURE HYSTEROPEXY - A SIMPLE TECHNIQUE FOR UTERINE PRESERVATION

Seman E, Bedford N

Laparoscopic uterosacral hysteropexy is the most popular procedure recommended by Australian & New Zealand gynaecologists to women undergoing pelvic floor repair who wish to retain their uterus (39% in a 2007 survey¹). This technique uses the uterosacral ligaments for resuspension whilst other suturing methods use the sacral promontory or round ligaments for anchorage. We present the Lyons-Liu technique of uterosacral hysteropexy which has been used in 119 cases at Flinders Medical Centre since 1999.

103 cases were available for analysis in 2010. The mean age was 58, mean weight 70kg, & median parity 3. Fourteen had had previous prolapse surgery. Presenting symptoms included bulge (74), stress urinary incontinence (33) and dyspareunia (8). Median POPQ stage at presentation was two. Sixty five women had associated defects in the anterior compartment, 10 had posterior defects, & 12 had defects in all 3 compartments (global).

Forty eight women underwent therapeutic hysteropexy (resuspension of a prolapsed uterus) & 55 had prophylactic hysteropexy (reinforcement of uterine support during anterior and/or posterior compartment repair). Mean operating time for hysteropexy & associated procedures was 2 hours, and the mean estimated blood loss was 50 mls. Mean postoperative stay was 4 days. There were 2 major complications — 1 cystotomy (laparoscopically repaired) and one small bowel obstruction requiring laparotomy and small bowel resection. There were no cases of ureteric injury or major haemorrhage (>1000mls).

Thirty six women were followed for <1 yr & 44 were followed > 3 years. Mean time to failure (POPQ point C>=-1) was 104 wks. More failures were seen in the therapeutic group (19/48 or 40%) than the prophylactic group (12/55 or 22%).

Recurrent uterine prolapse is thought to be due to incorrect suture placement, excessive knot tension, failure to treat coexisting anterior and posterior wall prolapse (ie undertreatment), and uterine retroversion which predisposes to cervical hypertrophy. Prevention of uterine retroversion by combining ventrosuspension with hysteropexy is demonstrated. The management of post-hysteropexy prolapse is discussed and normally involves hysterectomy with pericervical adhesiolysis (technically difficult),



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apical resuspension & treatment of coexisting anterior and posterior compartment defects.

REFERENCE:

 Vanspauwen R, Seman E, Dwyer P. Survey of current management of prolapse in Australia & New Zealand. ANZJOG 2010; 50: 262-267

AUTHOR AFFILIATION: Elvis Seman and Nick Bedford; Department of Obstetrics, Gynaecology and Reproductive Medicine, Flinders Medical Centre, South Australia, Australia.

Session 3 / 1410-1430

VAGINAL UTEROSACRAL / SACROSPINOUS HYSTEROPEXY

Lotze P

OBJECTIVES: A hysterectomy has long remained a standard component of pelvic reconstructive surgery. However, for those patients who want to maintain their fertility, the need for a hysterectomy is increasingly questioned. The goal of this presentation is to examine the differing viewpoints of maintaining versus removing the uterus. Techniques for performing a transvaginal suture repair and the available literature on success rates will be reviewed.

METHODS: A literature review of the transvaginal uterosacral ligament suspension and sacrospinous hysteropexy will be described. Emphasis is placed on surgical techniques that do not involve mesh /graft implant as a component of the suspension technique.

RESULTS: To date, there is very limited data on the transvaginal uterosacral suspension with some authors reporting success rates of ~85%. This paucity of data may be in part due to the limited performance of this challenging approach. The sacropinous hysteropexy has success rates of 89% - 93%. These success rates are similar to those reported for abdominal suspension procedures such as the sacrohysteropexy. Assessments of functional outcomes show few operative complications, a shorter return to work, and lower risk of subsequent irritative bladder symptoms.

CONCLUSIONS: Surgical approaches to uterine-sparing surgery are becoming more commonplace. Although outcome data for the transvaginal uterosacral ligament suspension remains sparse, the data on the vaginal hysteropexy is broad. Studies to date have demonstrated acceptable cure rates. Functional outcomes, when compared to patients undergoing a hysterectomy, tend to

favour uterine-sparing procedures. Still, studies have been limited by lack of selection bias and well-developed randomized control trials. Despite this, sacrospinous hysteropexy remains a viable consideration for patients with apical prolapse who desire uterine preservation.

RECOMMENDED READING:

1. Zucchi A, et al. (2010) Uterus preservation in pelvic organ prolapse. Nat Rev Urol. 7:626-633.

AUTHOR AFFILIATION: Peter Lotze, MD, FACOG; Fellowship Director, Urogynecology and Pelvic Reconstructive Surgery Women's Pelvic Health & Continence Center Clinical Assistant Professor, Division of Urogynecology, Dept of OB/Gyn UTHSC-Houston; Baylor College of Medicine Houston, Texas, USA.

Session 3 / 1440-1500

MANCHESTER REPAIR REVISITED: OBSOLESCENCE OR A UTERINE SPARING ALTERNATIVE?

McEvoy M

Initially Archibald Donald, working in the heavily industrialized area of Manchester with a high parity female cotton mill workforce, developed the Manchester repair in 1888 after many failures with standard repair. He claims that the first series of repairs were 97% successful!

Dr William Fothergill, a junior colleague, made several modifications to the procedure and wrote it up in journals. It was subsequently eponymously known as the Donald—Fothergill Operation and later the Manchester operation. A detailed account of the procedure will be given: essentially it involves amputation of the cervix, plication of the cardinal ligaments anteriorly into the supracervical ring, and a posterior Sturmdorf suture plicating the uterosacrals posteriorly. No entry to the peritoneal cavity made it a safer anaesthetic procedure than for vaginal hysterectomy

Contemporary indications for Manchester repair may include prolapse in which uterine preservation or future fertility is desired, or in the situation of severe cervical elongation. It is hard to determine from the literature what obstetric outcomes are expected after Manchester, although anecdotally prematurity is common.

Today preservation of the uterus is less frequently requested, although a request for avoidance of mesh use is frequent in our highly educated population of women. These days there are very good abdominal, laparoscopic and vaginal vault suspending



procedures e.g. vaginal sacrospinous fixation, laparoscopic uterosacral plication, and laparoscopic mesh sacrocolpopexy and sacrohysteropexy that have largely superseded the Manchester Repair. While it is hardly ever performed in developed countries, fellows should know of its existence and technique when the occasional need arises.

There are few comparative case studies in the modern literature apart from a study from Delft by de Boer and Thys from Veldhoven. In comparison to vaginal hysterectomy (VH) for prolapse, Manchester repair (MR) has less blood loss, shorter operating time, less morbidity with similar functional and anatomical outcomes

In conclusion I offer it as an additional viable modern alternative with application to women seeking uterine preservation and avoidance of mesh use.

REFERENCES:

- Fothergill WE. Anterior colporrhaphy and its combination with Amputation of the cervix as a Single Operation, BJOG, 1915, 27: 146 -147
- De Boer,T, Milani,A,Kluivers,K, Withagen,M,Vierhout M, The effectiveness of surgical correction of uterine prolapse: cervical amputation with uterosacral ligament placation (Modified Manchester), Int Urogynecol J , 2009, 1313
- Thys,S, Coolen,A, Martens,I, Oosterbaan,H, Roovers,J, Mol,B, Bongers,M, A comparison of long term outcome between Manchester Fothergill and vaginal hysterectomy as treatment for uterine descent, Int Urogynecol J 2011

AUTHOR AFFILIATION: Dr Michael McEvoy; Gynaecologist, Women's and Children's Hospital, North Adelaide, South Australia, Australia.

Session 4 / 1600-1620

RING PESSARY USE BEFORE, DURING, AND AFTER PREGNANCY

Moore KH

Vaginal ring pessaries can be used to manage prolapse, incontinence or both.

The tradition Portex ring that most gynaecologists are familiar with is used for prolapse and thus would not usually involve women before pregnancy. However the Contiform device is very useful for stress incontinence in fit healthy young women who have no prolapse at all (Morris & Moore, Int Urogynae J, 2003), many of whom are nulliparous.

During pregnancy, there is very little published data regarding the use of vaginal rings of any sort, however personal anecdotal experience in a handful of patients will be shared.

The post partum and or post menopausal women is the largest consumer for vaginal pessaries of any type. An overview of the rings provided in the Pelvic Floor Unit at St George will be given.

One of the main issues regarding vaginal ring pessaries is the long term outcome in women using it for many years: because very little data existed, we conducted a large scale of this subject (Sarma et al, Brit J 0&G 2009).

Over the 10 index years of the study (1992–2002), there were 27, 732 attendances at the PFU. We identified 273 women who had prolapse as a main complaint. We also identified 189 women who complained of concomitant stress incontinence and had an Introl device fitted. The long term outcomes over a 14 years maximum duration will be described.

AUTHOR AFFILATION: A/Prof Kate H Moore, The Pelvic Floor Unit, St George Hospital, UNSW, Sydney, NSW, Australia.

Session 4 / 1620-1640

PREGNANCY AFTER CONTINENCE SURGERY

Rosamilia A

What is known about pregnancy, delivery, and the development of $\mathop{\rm SUI}\nolimits ?$

Women with postpartum stress incontinence have significantly greater antenatal bladder neck mobility compared to continent women, indicating that biochemical changes in the connective tissues occur.

5-10% of nullipara have urinary incontinence with an increase occurring in the mid trimester of pregnancy. The strongest predictive factor for the development of post partum urinary incontinence is mid pregnancy urinary incontinence. Older maternal age appeared to be predictive for bothersome stress urinary incontinence 1 year postpartum. The first pregnancy and delivery contribute most to the development of urinary incontinence after delivery. Stress incontinence (any and not just bothersome) was present 3 months after vaginal delivery and caesarean section in 34 and 7%, respectively and after 12 months in 40 and 22%, respectively. Caesarean delivery is only partially protective.

What happens with a mid-urethral sling or colposuspension during pregnancy?



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There are some case reports confirming that the TVT remains intact during pregnancy and after delivery on ultrasound assessment.

What is the most optimal way to deliver after a preceding midurethral sling procedure?

If no stress incontinence develops during pregnancy, it is quite difficult to advise about mode of delivery.

If nulliparous, arguments for elective caesarean delivery include vaginal delivery contributes significantly more to the development of SUI than a caesarean section. On the basis of the Epincont Study, the risk of SUI after a vaginal delivery is 2.4 times higher compared to a caesarean section. Postpartum continence rates after preceding bladder neck suspension are 73% after vaginal delivery and 92% after caesarean section. The argument against an elective caesarean delivery is that this represents major surgery with considerable impact on future pregnancies eg. risk of uterine rupture.

If multiparous, the discussion is more difficult, as subsequent pregnancies contribute less to the development of SUI than the first pregnancy and delivery.

In cases where SUI develops during pregnancy after preceding incontinence surgery, there is a tendency in literature not to advise an elective caesarean delivery. The natural course of SUI after pregnancy indicates that SUI resolves in a significant percentage. A midurethral sling is a minimally invasive procedure compared to an elective caesarean delivery. A second midurethral sling is likely to be as effective as the first one. One reason for an elective caesarean delivery might be that increased damage to the urethral sphincter due to a vaginal delivery can be prevented. However, there is no evidence to support this.

Approach may be; Try to complete childbearing before any incontinence surgery.

If a woman is pregnant after mid-urethral sling surgery, institute conservative treatment during pregnancy. Advise vaginal delivery in an otherwise uncomplicated pregnancy irrespective of recurrent incontinence.

If incontinence occurs or persists postpartum, await spontaneous recovery for at least 6 months up to one year.

Repeated mid-urethral sling procedure, if necessary, is most likely safe and effective (not enough data).

REFERENCE:

Int Urogynecol J (2008) 19:441-448

AUTHOR AFFILIATION: Dr Anna Rosamilia; Urogynaecology and Pelvic Reconstructive Surgery, Cabrini Medical Centre, Malvern, Victoria, Australia.



Session 5 / 0825-0850

DYNAMIC EPISIOTOMY AND BLAST LABIAL TEARS

Rane A

Cochrane review by Carolli et al (2004) recommended the use of a 'restricted' episiotomy policy. Their review suggested that there was no benefit over a 'liberal' use of episiotomy policy as far as pain, third degree tear prevention and other issues were concerned. In that same review the last conclusion showed a 5 times increased risk of anterior perineal trauma in the 'restricted' episiotomy group.

This talk intends to discuss an 'individualised' policy for episiotomy to reduce or prevent anterior perineal trauma and explores further understandings of anatomical changes during the second stage of labour.

The concept of 'dynamic' episiotomy explores how and how much to cut, when to cut and when to stop. It also explores the concept of tissue restoration after an episiotomy and how to deal with those 'blast' tears with an 'intact' perineum.

AUTHOR AFFILIATION: Professor Ajay Rane, James Cook University, Townsville, Queensland, Australia.

Session 5 / 0850-0910

ANATOMY & IMAGING OF LEVATOR TRAUMA

Lee J

The levator ani is a muscular plate surrounding a central v-shaped hiatus, forming the caudal part of the abdominal envelope. It encloses the largest potential hernial portal in the human body, the 'levator hiatus', containing the urethra, vagina, and anorectum. Its peculiar shape and function is a compromise between priorities that can be difficult to reconcile. Whilst abdominal contents have to be secured against gravity, solid and liquid wastes have to be evacuated. In addition, and most importantly, there are the requirements of reproduction: intercourse and childbirth. The latter is the most extreme of tasks required of the pelvic floor, particularly in view of the size of the baby's head. The levator ani muscle has to distend enormously, and the degree of distension required varies greatly between individuals, by at least a factor of 5. Trauma to the puborectalis muscle as a consequence of childbirth was first reported in 1943, only to be forgotten for 60 years. It is difficult to believe, but this major form of maternal birth trauma, easily palpable vaginally, and occasionally visible in the delivery suite in women with large vaginal tears is missing from general obstetric and midwifery textbooks. It is generally assumed that skeletal muscle will not stretch to more than twice its length without tearing. Hence, it is remarkable that in many women the puborectalis does not suffer any significant trauma despite much greater degrees of distension. In about half of all women there is no appreciable change in distensibility or morphologic appearance after vaginal delivery.

Levator avulsion is the disconnection of the muscle from its insertion on the inferior pubic ramus and the pelvic sidewall, whereas tears may occur in any part of the muscle. Avulsion is a common consequence of overstretching of the levator ani during the second stage of labor and occurs in 10–36% of women at the time of their first delivery. It is usually occult, but has been demonstrated in the delivery suite in patients with large vaginal tears. Levator avulsion, although palpable, is detectable more accurately by imaging, as the lateral attachments of the levator ani to the pubic bone are clearly visualized. 3DTVS and 3D-TPUS may be utilized to document major levator trauma, as can MRI. Defects are usually visualized most clearly on maximal PFMC. Tomographic ultrasound imaging is particularly useful.

The functional and anatomical consequences of levator ani avulsion are considerable, with a reduction in muscle strength of about one-third and marked alteration of anatomy. The main effect of avulsion is probably due to enlargement of the levator hiatus, but avulsion may also be a marker for other forms of trauma, such as damage to connective supporting structures (uterosacral ligaments and endopelvic and pubocervical fascia), which are currently difficult to detect by imaging. An enlarged levator hiatus, whether congenital or due to irreversible over-distension or avulsion injury, may result in excessive loading of ligamentous and fascial structures, which may, over time, lead to connective tissue failure and the development of prolapse. However, the role of ballooning is likely to be much more complex than that of avulsion, and it is not clear to what degree it is primary, i.e. causative, rather than secondary to POP.

Using MRI, investigators found that women with POP have an odds ratio of 7.3 for having a major levator injury compared with asymptomatic women. These data were confirmed in a larger series using TPUS. Patients with, compared with those without, a levator ani defect are 2.3 times more likely to have a significant cystocele, and four times as likely to have uterine prolapse. It seems that, compared with any of the other components of the levator ani, trauma to the puborectalis component is most significant in affecting both the size of the hiatus and the symptoms and signs of prolapse.

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There are concerted efforts to confront the problem posed through levator trauma. Investigators have already started to develop potential methods to prevent levator trauma in labour ward. There have also been reports of attempts to repair such trauma. Effects of vaginal mesh kits on levator biomechanics are emerging. Research efforts have now been urgently directed to ways to correct or compensate for altered biomechanics due to either levator avulsion or levator ballooning.

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ACKNOWLEDGEMENT: I am grateful for the opportunity to learn Pelvic Floor USS with Prof H.P.Dietz. References to the above texts can be found below.

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Session 5 / 0910-0930

POSTNATAL VOIDING DYSFUNCTION

Lotze P

The diagnosis of postnatal voiding dysfunction requires careful attention to the post-partum patient, maintaining clear records of spontaneous voids, and rapidly assessing those patients who are suspected to have retention. Bladder function is recognized to change during pregnancy and the immediate post-partum period. Those changes can include increased bladder capacity, altered bladder sensations, and an increased post-void residual. The route of delivery, anaesthesia applied, as well as the use of forceps are also among numerous risk factors which can alter the patient's ability to void following delivery.

The mechanisms of monitoring post-partum patients voiding varies from country to country. However, the guidelines developed by national governing bodies generally are very similar with respect to managing the bladder during labor and expected time to first void following delivery. Despite the availability of these guidelines, few hospitals implement measures to monitor patients and minimize this risk. Further, those systems that are in place often differ significantly from one another.

When detected, postnatal voiding dysfunction generally warrants immediate catheterization of the bladder to avoid risks associated with overdistention. In most cases, the duration for catheterization is brief. Recommendations on patient management are available for patients requiring greater durations of catheterization. Alternatives to catheterization, such as medications, have a very limited role in voiding dysfunction.

RECOMMENDED READING:

- Govt of South Australia, Dept of Health. Perinatal Practice Guidelines: Postpartum Bladder Dysfunction. Section 6; Chapter 108. Developed 2005; Reviewed 2009. www.health.sa.gov.au/ PPG/Default.aspx?PageContentID=1379&tabid=185
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AUTHOR AFFILIATION: Peter Lotze, MD, FACOG; Fellowship Director, Urogynecology and Pelvic Reconstructive Surgery Women's Pelvic Health & Continence Center Clinical Assistant Professor, Division of Urogynecology, Dept of OB/Gyn UTHSC-Houston; Baylor College of Medicine Houston, Texas, USA.

Session 5 / 0930 - 0950

OBSTETRIC TRAUMA: WHAT PHYSIOTHERAPY CAN OFFER

Neumann P, Sherburn M

The management of severe perineal trauma from a physiotherapy perspective will be presented, including data about the role of physiotherapists in the care of the perineum after childbirth from a 2008-09 survey of member hospitals in the Women's Hospitals Australasia network. In the absence of adequate guidelines on the post-surgical management of 30/40 lacerations, a framework for physiotherapy management will be presented, based on the principles of tissue healing, sports medicine and extrapolation from orthopaedic surgery.

Program Abstracts Saturday 4 June

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- 2. Kannus P, Parkkari J, Jarvinen TLN et al (2003) Basic science and clinical studies coincide: active treatment approach is needed after a sports injury. Scand J Med Sci Sports 13:150-154

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Session 5 / 0950 - 1010

ASSESSMENT OF ANAL SPHINCTER FUNCTION AND DELAYED ANAL SPHINCTER REPAIR

Wattchow D

Continence of faeces depends upon normal bowel function, anal tone and anatomy. The commonest cause of faecal incontinence is reduced anal tone due to anal muscular weakness. There are varying causes including pelvic radiotherapy, anal muscular trauma, anal sphincter division, low rectal surgery — but the commonest cause is obstetric trauma. A number of different studies have shown that about one third of women sustain damage to the anal sphincter with vaginal delivery. Mostly however, these patients are asymptomatic, and about 2% present later in life with the problem of faecal leakage of varying degrees.

Anal tone can be studied by rectal examination and it is valuable to ask the patient to squeeze, or cough, on digital examination of the anus. The resting and squeeze pressure can be measured by anal manometry. The resting pressure is largely a reflection of tone generated by the internal anal sphincter. This is a reliable measure, with little variation. The additional squeeze pressure is due to the external anal sphincter contribution. Such measurement is much more variable. Additionally the contribution of the pudendal nerves can be estimated by measuring pudendal nerve terminal motor latency. These nerves can be damaged along their course by the effects of childbirth, and such damage lowers sphincter pressures and contributed to faecal incontinence.

The principal treatment of faecal incontinence is with diet and medications to solidify the stool. Pelvic floor physiotherapy has

a significant impact on patient symptoms, and it the next line of treatment. Such therapy is effective even if there is a demonstrated sphincter tear.

Anal sphincter repair is indicated in those cases where there is a large sphincter defect, and conservative measures have not worked. Healthy sphincter is dissected out, working from normal tissues, to the scar, which is mostly anteriorly based. Debate surrounds the role of repairing the internal anal sphincter, and the role of diverting the faecal stream while the repair heals. Many surgeons leave the skin wound open, or partially open. Skin healing can be a problem, and require a flap repair to achieve healing.

In some patients the sphincters are intact, but there is sphincter weakness allied with incontinence. The new treatment of sacral nerve stimulation is indicated for such patients, and increasingly used for those with a sphincter defect. Also to be considered is a post anal levator plication. This option has some value, and is worth considering as the size of the procedure is small. The final option of formation of a stoma can improve the quality of life for patients — this may require removal of the rectum if there is distressing leakage of mucous, or the development of diversion proctitis.

AUTHOR AFFILIATION: Dr David Wattchow, Clinical Director of Gastrointestinal Surgery, Professor of Surgery/Senior Consultant, Flinders University/Flinders Medical Centre.

Session 6 / 1100-1130

CYSTOSCOPY & TROUBLESOME LUT PROBLEMS

Lotze P

Irritative bladder symptoms are commonplace in a gynecologist's practice. Disorders such as recurrent urinary tract infection, interstitial cystitis, the overactive bladder, and bladder malignancies are not unusual to a typical practice and the physician should be familiar with the incidence and risk factors for these various diseases.

Cystoscopy is an easily performed procedure both in the office as well as in the operating theatre. Generally, cystoscopy is 'diagnostic' and is used to observe the bladder surface. An 'operative' cystoscopy is occasionally done in times of bladder biopsy, injection, fulguration of a bleeding vessel, or removal of a foreign body (e.g. stone, suture). Various types of cystoscopes are available as are sheathes and accessories for the scope. Physicians should be familiar with means to perform a routine bladder survey — which



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is often standardized between patients. Identification of pathology and knowing how to respond to it is paramount to completing the procedure.

This lecture will define and describe the incidence of common bladder disorders. A video will be shown that highlights proper indications, equipment, and technique for performing diagnostic cystoscopy.

RECOMMENDED READING:

- 1. Ostergard's Urogynecolgy and Pelvic Floor Dysfunction. Lippincott Williams & Wilkins; Sixth ed (July, 2007).
- 2. Lotze P. Video: Diagnostic Cystoscopy (2010) available on YouTube.

AUTHOR AFFILIATION: Peter Lotze, MD, FACOG; Fellowship Director, Urogynecology and Pelvic Reconstructive Surgery Women's Pelvic Health & Continence Center Clinical Assistant Professor, Division of Urogynecology, Dept of OB/Gyn UTHSC-Houston; Baylor College of Medicine Houston, Texas, USA.

Session 6 / 1210-1230

VAGINAL CLOSURE OF LOWER GENITO-URINARY TRACT FISTULA

Goh J

Obstetric fistula is the most common fistulae world-wide. Most commonly, it is due to prolonged obstructed labour with pressure necrosis, subsequent sloughing of the affected tissue and formation of the fistula. Obstetric genito-urinary fistulae may also occur from operative deliveries.

In prolonged obstructed labour, the lower urinary tract is at risk with the fetal presenting part compressing the vagina and bladder/urethra against the back of the pubic symphysis. The fetal presenting part often also causes urethral obstruction and the distending bladder is placed at further risk of injury. There is also a risk to the rectum from pressure necrosis but the rates are much lower. Unrepaired fourth degree tears also cause faecal incontinence.

A high degree of suspicion is required for early detection and hence early intervention and counselling. Immediate management usually depends on the nature of injury. If a fistula is detected in the first few days following delivery, treatment options include prolonged catheterisation. Spontaneous closure of the fistula may occur with prolonged catheterisation. If the fistula is detected early and is not

due to pressure necrosis, early surgical closure is another option if the fistula site has little/no inflammation or infection. Once the fistulous tract is established and epithelialised, little is gain with prolonged catheterisation in hope of spontaneous closure.

Various investigations are available. For fistulae in the bladder/ urethra, an examination may be all that is required. If the fistula is large, the defect is palpated or visualised during a vaginal examination. A dye test may be performed with instillation of dilute dye into the bladder via a catheter. Imaging is usually required to diagnose a ureteric fistula. A urethrocystocopy may also be used as a diagnostic tool.

Timing of surgical management of the bladder or urethral fistula would depend on the nature of the injury, previous history, time of diagnosis from injury, the condition of tissue around the fistula (eg infected, inflamed). Surgery for urinary fistulas is fraught with a number of controversies. Foremost are the timing of closure of the fistula (early or delayed) and the route of repair (vaginal or abdominal). Other controversies include the surgical techniques, use of grafts and length of catheterisation.

There are a number of basic principles of fistula repair. These include:

- · Prophylactic antibiotics
- · Adequate exposure
- · Cannulation of the ureters if indicated
- · Mobilisation of the bladder from the vagina
- Haemostasis
- Tension free closure of the bladder and testing the closure for example, with diluted methylene blue solution
- Postoperative bladder drainage

In vaginal repair of fistulae, the flap-splitting technique is usually used. For upper vaginal fistulas, this technique is preferable to the Latzko as it does not shorten the vagina. Adequate exposure during surgery is achieved by optimisation of the patient's position (eg Trendelenburg, inclination depending on site of the fistula), good lighting, experienced assistants and often division of vaginal/perineal scarring to allow access to the fistula.

Anatomical distortion may alter the site of ureteric orifices. It is essential to exclude ureteric involvement, especially in the large fistula, very scarred fistula and fistula near the trigone. Where ureters are near or involved with the fistula, cannulation is vital to reduce the risk of ureteric obstruction from oedema around the surgical site or ureteric incorporation into the repair

Apart from the obvious injuries in the genital and urinary tract, genital tract fistulae particularly following prolonged obstructed



labour may result in a number of other complications including psychological, orthopaedic, reproductive, sexual and pelvic floor dysfunction. Although the surgical treatment of genitourinary fistulas addresses the physical defect, a holistic approach is required.

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AUTHOR AFFILIATION: Judith Goh FRANZCOG, PhD, CU. Urogynaecologist, Greenslopes Private Hospital, Brisbane, Australia.

Session 8 / 1610-1630

PELVIC SIDEWALL AND PARAVAGINAL ANATOMY

Lotze P

The trend toward both minimally invasive incontinence surgery as well as mesh kits have made knowledge of the anatomy of the Space of Retzius increasingly important. Although surgeons have focused on select targeted tissues (e.g. sacrospinous ligament), neighbouring structures represent potentially significant risk for complications if injured. Those structures may include visceral structures, such as the bladder and rectum, as well as major nerves and blood vessels in the region. Segments of a video on the Space of Retzius will attempt to demonstrate some of these structures.

Minimally invasive surgery in the abdomen such as laparoscopic hysterectomies and sacrocolpopexies have also become more frequent. The subsequent dissection and use of electrical energy such as bipolar cautery can increase the risk of ureteral injury. The course of the pelvic ureter from its entry point at the pelvic brim to its location in the Cardinal ligament becomes increasingly important to know as a result. In general, the ureter — lateral to the uterosacral ligament — can be found approximately 4 cm lateral to the proximal

third, 2.5 cm lateral to the middle third, and 0.9 cm lateral to the distal third of the ligament. Segments of a video will be shown to highlight this anatomy. The benefit of lighted ureteral catheters will be demonstrated.

RECOMMENDED READING:

1. TeLinde's Operative Gynecology. Lippincott Williams & Wilkins; Tenth ed. (April, 2008)

AUTHOR AFFILIATION: Peter Lotze, MD, FACOG; Fellowship Director, Urogynecology and Pelvic Reconstructive Surgery Women's Pelvic Health & Continence Center Clinical Assistant Professor, Division of Urogynecology, Dept of OB/Gyn UTHSC-Houston; Baylor College of Medicine Houston, Texas, USA.



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Session 7 - Free Communications A 1350-1400

LAPAROSCOPIC MESH SACROCOLPOPEXY: 6-YEAR OUTCOMES AT CARE, SYDNEY

Patel PS, Dunkley EJC, Lam A

OBJECTIVE: To evaluate the outcomes of laparoscopic mesh sacrocolpopexy (LSC) for Level I prolapse.

METHODS: A prospective analysis was conducted on all patients undergoing LSC using Gynemesh® by a single surgeon at a tertiary referral centre between November 2004 and December 2010. Cure was evaluated subjectively based on patients' answers to standardised questions regarding bowel, bladder and sexual function, and objectively by pelvic exam findings at pre- and post-operative visits using the pelvic organ prolapse quantification (POP-Q) scale. Postoperative follow-up included routine visits at 6 weeks and 12 months, as well as any unscheduled visits.

RESULTS: A total of 164 patients, at a mean age of 63 ± 10 years, underwent LSC. Eighty two percent had POP-Q Stage ≥ 3 , and 66% had recurrent prolapse.

Thirty seven patients (23%) underwent laparoscopic hysterectomy at the time of LSC; 108 (66%) had concurrent Level II/III repairs. The average overall operative time and estimated blood loss were 115 min and 77 mL respectively. The only intra-operative complications consisted of 2 cases of bleeding during paravaginal dissection, and neither patient required a transfusion. Major post-operative complications included 1 case of bleeding due to anticoagulant use, requiring 3 units of blood transfusion, 1 transient ischemic attack, 1 new onset atrial fibrillation, and 1 case of deep vein thrombosis.

Two patients were lost to follow-up; the remaining 162 patients were followed for an average of 11 months. The objective cure rate of LSC, defined as an apical POP-Q stage of \leq 1, was 98%. The 3 procedural failures were first diagnosed at an average of 9 months, and only one patient needed re-operation. All 44 patients who had previously failed a Level I repair had successful outcome after their LSC. Of the patients who had Level II Stage \geq 2 defects who did not undergo concurrent site-specific repairs, 92% were cured by LSC alone.

Subjectively, cure was noted in 94% of patients with general prolapse symptoms, 83% with obstructive bladder symptoms, 60% with bowel symptoms, and 89% of patients with sexual symptoms. Eight patients (6%) developed occult stress incontinence, and 5 (4%) experienced de novo dyspareunia. Nine (6%) mesh erosions

occurred, at an average of 23 months after surgery. There was a non-significant trend towards higher mesh erosion in patients who underwent concurrent hysterectomy (11% vs 4%, P=0.212).

CONCLUSIONS: LSC is an effective, minimally invasive option for apical vaginal prolapse.

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Session 7 - Free Communications A 1400-1410

SIX-YEAR REVIEW OF PELVIC FLOOR REPAIRS IN AN ESTABLISHED ENDOGYNAECOLOGICAL UNIT: THE EMERGENCE OF THE LAPAROSCOPIC SACROCOLPOPEXY

<u>Fleming T</u>, Cario G, Chou G, Rosen D, Cooper M, Reid G, Aust T, Reyftmann L

In the age of evidence based medicine, surgical management of common conditions must evolve accordingly. Following publication of the Cochrane Systematic Review in April 2010 (Maher et al), the laparoscopic sacrocolpopexy (LSCP) has become the gold standard of surgical treatment for pelvic organ prolapse.

The pelvic floor data from a multicentre gynaecological endoscopic unit have been retrospectively reviewed to assess the distribution of prolapse procedures undertaken and the incidence of complications associated with these procedures. The practice consists of five advanced laparoscopic surgeons and cumulative data encompasses greater than 1500 cases of surgical management of pelvic floor deficiencies. Pelvic floor repair is a primary component of surgical activity for this unit, representing 19% of total workload.

The most outstanding feature of this data is the evolution of surgical preferences from laparoscopic anterior and posterior pelvic floor repairs, to the preponderance of LSCP. In the five year period from 2005 to 2009, LSCP represented only 14% of surgical management for prolapse. This is in stark contrast to the 2010 data, where LSCP was the preferred surgical approach in 60% of pelvic floor operations.

With any new surgical technique, there is a learning curve during the acquisition of the skill. LSCP is a particularly complicated procedure, and the effect of the learning curve was evident even within this experienced group of laparoscopic surgeons. This was reflected on

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review of the procedure-specific complications, demonstrating an increased incidence of bowel injuries to 2.2% compared with the previous rate of 0.5%.

In addition to this, emerging techniques are also associated with a new, and sometimes unanticipated, spectrum of complications. Further discussion will be granted to novel complications arising, including an interesting case of pubic osteomyelitis following LSCP.

REFERENCE:

Surgical management of pelvic organ prolapse in women. Cochrane Database of Systematic Reviews. April 2010. C. Maher, B. Feiner, K. Baessler, M. Glazener

AUTHOR AFFILIATION: G. Cario, D. Chou, D. Rosen, M. Cooper, G. Reid, T. Aust, L. Reyftmann; Sydney Women's Endosurgery Unit, St George Private Hospital, Kogarah New South Wales, Australia.

Session 7 - Free Communications A 1410-1420

FUNCTIONAL OUTCOMES FOR SURGICAL REVISION OF SYNTHETIC SLINGS PERFORMED FOR VOIDING DYSFUNCTION

Agnew G, Dwyer PL, Rosamilia A, Edwards G, Lee JK

INTRODUCTION AND HYPOTHESIS: Synthetic slings (SS) are now the most common treatment for female stress urinary incontinence (SUI). Voiding dysfunction is a recognised complication of SS placement. The aim of this study was to evaluate the functional outcomes after sling revision for voiding dysfunction.

METHODS: Retrospective review identified 63 women who underwent surgical revision of a SS for the indication of voiding dysfunction between 2000 and 2010 inclusive. Comprehensive urogynaecological evaluation was performed in all women, and perioperative and postoperative data were analysed. Voiding dysfunction was defined objectively as a persistently raised post void residual of >150mls.

RESULTS: Sixty three women underwent sling revision for the indication of voiding dysfunction with an overall success rate of 87%. Three types of procedure were carried out; simple SS division, (46/63, 73%), partial excision of SS material (13/63, 21%) and either division or excision but with a concomitant procedure to prevent recurrent SUI, (4/63, 6%). The mean interval between initial placement and subsequent revision was 12.4 months.

The prevalence of persistent voiding dysfunction following SS revision was 5/46(10.9%) in the division group, 1/13(7.7%) in the partial excision group and 2/4(50%) in the concomitant group (p=0.09). Subsequent surgery for recurrent SUI was 1/46(2.2%) in the division group, 3/13(23.1%) in the partial excision group and 0/4(0%) in the concomitant group (p=0.04).

Of the 41 women with preoperative urodynamic investigations prior to initial sling placement 4(9%) had evidence of voiding dysfunction prior to placement of the initial SS. Three of these 4 has persistent voiding problems following sling revision.

CONCLUSIONS: Sling revision is an effective treatment for post operative voiding dysfunction using either sling division or partial excision, but simple division has a lower risk of recurrent SUI. Evidence of voiding dysfunction prior to initial sling placement is uncommon but is a poor prognostic indicator for revision surgery. A concomitant SUI procedure at time of revision, may prevent recurrence but may increase the risk of persistent voiding dysfunction.

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Session 7 - Free Communications A 1420-1430

McEvoy M, Forbes A

BACKGROUND: The surgical management of posterior wall prolapse has seen a sharp increase in the use of polypropylene mesh, largely driven by industry and the significant failure rates of standard repair. Yet significant mesh morbidity occurs and outcome tools do not always support the use of mesh nor are they aligned to patient perceived overall success

MATERIALS AND METHODS: In this same surgeon same assistant cross over study ,the surgeon utilized Posterior Prolift mesh in the first 40 patients and then switched to 42 bilateral vaginal sacrospinous colpopexy (SSC) and standard posterior repair. Modified POP-Q before and after surgery and an anonymous, validated, relative (after compared to before) visual analogue scale of change in quality of life questionnaire (PROVAS) were sent by post at 6 12, 24, 36 and 48 months. They were analysed blindly and then collated .

RESULTS: Mean age at surgery (69 and 68 years), questionnaire



response rates (92 and 88 percent), were similar in the mesh and SSC groups. Improvement in the POPQ score were similar. The improvement in POPQ scores did not closely correlate with either overall satisfaction or PROVAS score.

PROVAS scores on the other hand were strongly correlated to overall satisfaction .

Serious intraoperative and postoperative complications were nil in each group.

Long term dyspareunia requiring reoperation occurred in 7.5% in the Mesh group. 2.5% of the SSC group required removal of suture in the rooms for chronic granuloma

CONCLUSIONS: Similar anatomical surgical results with less long term morbidity imply that SSC is an acceptable alternative to mesh kits. Our study is limited by not having blind POPQ assessments, and possibly limited power. We also used two different sutures (ethibond originally and then PDS) for our SSC technique. Some patients also had other procedures concomitantly.

Tools for assessment of surgery are problematic : both objective POPQ and subjective Quality of life questionnaires are poorly correlated with satisfaction

We offer PROVAS as an alternative assessment tool as it is better correlated with overall success rates as it is by its very nature a comparative (before and after) visual analogue scale.

No conflicts of interest to declare. Self funded research.

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Session 7 - Free Communications A 1430-1440

APICAL COMPARTMENT PROLAPSE FOLLOWING VAGINAL MESH REPAIR

Short J

BACKGROUND: A case series of 14 women, all of whom had previously undergone mesh-kit repair of vaginal prolapse and who later presented with symptomatic apical compartment prolapse in 2009 and 2010.

METHODS: A retrospective observational study. The patients were identified from hospital data management systems and a case note review was performed. Data collected included age, bmi, obstetric history, previous surgery, details of their prior mesh surgeries including type of mesh used and prolapse grading, and details of subsequent apical compartment prolapse including time interval following mesh surgery to presentation, prolapse grading, management and outcomes.

RESULTS:

Ages: range 43-81, median 63, mean 63.5

BMI: <30: 6

>30:

Parity: range 1-7, median 3, mean 3.2

total deliveries 45. caesarean sections 2 vaginal deliveries 43

1 x fourth degree tear

Prior mesh procedures:

Apogee alone- 2
Perigee alone- 2
Apogee and Perigee- 5

(2 surgeons were involved in these cases)

Ant Prolift 3
Ant and Post Prolift 2

(4 surgeons were involved in these cases, including the

total Apogee sales in region 2006-10 72 total Perigee sales in region 2006-10 88 total Ant Prolift sales 2006-10 105

total Post Prolift sales 2006-10 37 total Total Prolift sales 2006-10 76

(data provided by Johnson and Johnson medical and Obex medical [AMS distributor for New Zealand])



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This cohort represents 9.7% of local Apogee cases and 7.95% of local Perigee cases and approximately 3.8% of local Prolift cases.

OTHER SURGICAL DATA

- 1 woman had a concomitant hysterectomy. 1 had her uterus conserved and 1, who had previously undergone a subtotal hysterectomy, had her cervix conserved.
- Descriptions of prolapse severity at the time of mesh repair is generally of a poor standard and current grading/staging systems have not been used. However there is documentation of some degree of apical prolapse in at least half of the women at the time of their mesh repairs.
- Notably 3 women had previously participated in surgical workshops; 1 Perigee, 1 Ant and Post Prolift and 1 laparoscopic pelvic floor repair who had subsequently undergone an Apogee and Perigee.
- There were many other previous surgeries, gynaecological and otherwise, and co-morbidities in this cohort.

Time interval to presentation with apical prolapse:

 range 2 weeks - 26 months, median 5.5 months, mean 8.5 months.

Apical prolapse grading:

- range grade 1 to grade 4, median grade 3.
- 1 woman had a concomitant rectal intussusception

FURTHER MANAGEMENT:

laparoscopic sacrocolpopexy- 5 (4 by the author) lap converted to open SCP- 4 (4 by the author)

open sacrocolpopexy- 1

lap sacrocolporectopexyabandoned SCP

1 (by the author and a colorectal surgeon)
abandoned SCP

1 (by the author's fellow and the author)

Cube Pessary 1 awaiting SCP 1

3 of the 4 cases converted to open sacrocolpopexy had previously undergone anterior and posterior mesh repairs. Much reduced vaginal mobility was noted in these cases. Other factors for conversion included obesity, adhesions and excessive CO₂ absorption.

Of the 6 successful laparoscopic procedures, only 1 had previously undergone anterior and posterior mesh repairs. This case was described as "very difficult".

One sacrocolpopexy was abandoned intra-operatively following a cystotomy (repaired laparoscopically) and identification of a grossly enlarged bladder extending over the vaginal vault and filling the pouch of douglas with dense adhesions to the rectum. Access was insufficient to allow safe dissection and completion of the surgery.

She had previously undergone anterior and posterior mesh repair and is presently being considered for colpocleisis.

1 of the cases converted from laparoscopic to open SCP was complicated by an enterotomy identified the following day. This was managed by a small bowel resection and re-anastomosis. The mesh was initially left in place but was later removed due to concern about infection. Culture of the mesh was negative. Despite removal of the mesh the prolapse has not recurred.

OUTCOMES: All completed sacrocolpopexies were anatomical and symptomatic successes, although two women have subsequently developed recurrent cystocoeles, with the bladder prolapsing in front of the distal edges of their perigee and anterior prolift respectively. One of these is asymptomatic and one is considering further surgery. Ultrasound images from one of these cases are available for presentation.

SUMMARY OF FINDINGS: Apical prolapse following vaginal mesh repair is not an uncommon phenomenon in our population.

Presentation is often very early, within the first 12 months.

It appears to be more common following Apogee and Perigee compared to Prolift.

Sacrocolpopexy appears to be an effective management although there is a high rate of conversion from laparoscopic to open surgery, particularly in those women who have previously undergone anterior and posterior mesh repairs (the authors rate of conversion from laparoscopic to open sacrocolpopexy is otherwise less than 5%). This may be related to obesity and adhesions from previous surgery but considerably reduced vaginal mobility was noted in all cases and may be a factor.

There is a higher than normal rate of intra-operative complications in this group.

Women who have previously participated in surgical workshops are well represented in this cohort.

DISCUSSION: Factors potentially involved in the development of these prolapses include surgical factors, such as poor case selection or technique, patient factors, such as predisposition to recurrent prolapse and/or obesity, and device factors, such as mesh kits not providing adequate apical/level 1 support. Whilst some of these prolapses may represent genuine de novo prolapse in another compartment it is likely that in some cases the initial mesh procedures may not have been the ideal choice of operations, particularly for those in whom there was evidence of apical prolapse



at that time. For these women sacrocolpopexy may have been a better initial procedure, although one has to consider that factors such as previous surgery or obesity may have led surgeons to favour a vaginal approach. However, it appears that a sacrocolpopexy is more difficult after a vaginal mesh repair than beforehand.

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Session 7 - Free Communications A 1440-1450

OUTCOMES OF SURGICAL REVISION OF SYNTHETIC SLINGS FOR POSTOPERATIVE PAIN AND/OR SLING EXTRUSION

Agnew G, Dwyer PL, Rosamilia A, Edwards G, Lee JK

INTRODUCTION: Synthetic slings (SS) are now the most common treatment for female stress urinary incontinence (SUI). Surgical revision of the SS may be necessary to treat postoperative pain and/or extrusion of the SS material. The aim of this study was to identify the types of SS implicated in this complication and evaluate the subsequent functional outcomes such as recurrent SUI following revision surgery.

METHODS: We conducted a retrospective review of all women who underwent revision of a SS at our unit between 2000 and 2010 inclusive, for the indication of pain and/or extrusion of the sling material. The extent of surgical revision was at the surgeon's discretion, but in all cases consisted of at least partial excision of SS material.

RESULTS: Forty five women underwent revision for pain/sling extrusion during the study period. The mean interval between SS insertion and its surgical revision was 28.2 months ranging from 2 weeks to 17 years. Surgical revision, in all cases, consisted of at least partial excision of the sling material. Twenty three women had their SS partly excised and 22 had a complete removal of the SS material. Eleven slings were classified as infected on removal, 10 of these, were multifilament slings. Thirty nine women (39/45) had their SS revised for detectable extrusion of the sling material. Six women (6/45) had their SS revised for the indication of pain, without any detectable extrusion. Three of these slings were found to be infected on removal, IVS® (2) and Lynx® (1). The other three were transobturator slings; Monarc® (2) and TVT-O® (1). Subsequent to revision, pain resolved in all patients. Of the 45 women, 9/45

(20%), underwent a concomitant procedure to prevent recurrent SUI at the time of their revision procedure. Thirty six (80%) had no concomitant procedure at the time of SS revision. None of the concomitant group, but 11(36%) of the non concomitant group, subsequently required further surgery for recurrent SUI (0% [0/9] vs. 31% [11/36]; p = 0.056).

CONCLUSIONS: SS procedures for SUI may result in complications many years distant from the initial placement. If SS revision comprises excision of sling material, then a concomitant procedure to prevent recurrent SUI should be considered, provided infection is not suspected. Synthetic slings of a multifilament type are more strongly associated with infection and are not recommended.

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Session 7 - Free Communications A 1450-1500

PILOT STUDY TO COMPARE BARBED AND CONVENTIONAL SUTURES FOR FIXATION OF THE ANTERIOR VAGINAL PORTION OF MESH IN LAPAROSCOPIC SACROCOLPOPEXY

Aust T. Chou D, Cario G, Rosen D, Reyftmann L, Fleming T, Bertollo N. Walsh W

Bidirectional and unidirectional barbed sutures have recently been used for laparoscopic gynaecological procedures such as myomectomy and hysterectomy. They are also being used by some to attach mesh to the anterior vaginal wall to reduce operative time and to avoid laparoscopic knotting. We wished to examine whether these sutures would provide the same strength as conventional suturing using a reconstruction and testing the maximum tensions that could be applied.

Connective tissue was obtained from the abdominal walls of sheep euthanized from other experiments. 2cm width strips of the tissue acted as the internal surface of the vagina stripped of peritoneum. 2cm width strips of polypropylene mesh were then sutured to the tissue in a laparoscopic trainer to reproduce the conditions of a laparoscopic sacrocolpopexy.

Comparisons are planned between Quill bidirectional barbed suture, V-Loc unidirectional barbed suture and intracorporeally knotted PDS

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sutures. Once the mesh is attached the tissue and mesh are pulled apart under increasing tension and the maximum tension recorded.

So far these simulations have been performed on a small number of specimens in order to refine the experimental method. The aim of the experiments is to see if the barbed sutures provide an equivalent strength of mesh attachment to the anterior vaginal wall so that they would be suitable for this indication.

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Session 7 - Free Communications B 1350-1400

MINILAP TOTAL LAPAROSCOPIC HYSTERECTOMY: A VIDEO

Lee S, Soo S, Ang C

MiniLap Percutaneous Instruments are a family of ultra-thin, disposable graspers. The access insertion needle, which forms part of the instrument, eliminates the need for a trocar and port, leading to significant cost- and time- savings. Because these instruments measure only 2.3mm in diameter, closure of the insertion site is not required. The postoperative cosmetic outcome is also improved.

MiniLap Percutaneous Instruments further expands the range of surgical possibilities in the field of gynaecological endoscopy. In this presentation, the authors will summarise the rationale, case selection and port placement before the video of MiniLap total laparoscopic hysterectomy is shown. In the video, we will present the key elements, advantages and difficulties of this procedure.

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Session 7 - Free Communications B 1400-1410

SILS AND PELVIC FLOOR REPAIR, CASE PRESENTATION AND VIDEO

Behnia-Willison F, Jourabchi A, Hewett P

Single Incision Laparoscopic Surgery (SILS) is a new method of laparoscopic surgery in gynaecology. This procedure enhances the benefits of traditional laparoscopic surgery such as decreased blood loss and minimal postoperative pain. It also promotes a faster recovery process and has more cosmetic advantages.

A total number of 45 SILS operations have been carried out in South Australia since 2009. For the first time in Australia, laparoscopic mesh sacrohysteropexy has been performed in with SILS method in Ashford Hospital.

The video presentation shows mesh sacrohysteropexy with SILS method on a 70 year old patient with Global Prolapse Stage II. This surgery has been done through a single incision on the umbilicus. It lasted for about 55 minutes. It was uneventful and after 6 weeks the site of the surgery was scarless and the patient was satisfied with the results of the surgery.

The aim of this study is to demonstrate the feasibility and safety of SILS in mesh sacrohysteropexy in vaginal prolapse.

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Session 7 - Free Communications B 1410-1420

S-PORTAL VS SILS SINGLE INCISION LAPAROSCOPIC HYSTERECTOMY - VIDEO COMPARISONS

Lee S, Soo S, Ang C

Single incision laparoscopic hysterectomy has emerged as an attempt to further enhance cosmetic benefits and reduce morbidity of minimally invasive surgery. Single Incision Laparoscopic Hysterectomy (SILH) was first performed 20 years ago by Dr M. Pelosi, 2 years after the first total laparoscopic hysterectomy (TLH) was performed in 1989. In contrast to conventional TLHs, SILH required the insertion of laparoscopic instruments, as well as the laparoscope, all through a single umbilical incision. The first single incision laparoscopic hysterectomies therefore encountered significant issues of peritoneal gas leakage, clashing instruments both intra- and extracorporeally and difficult closure of the vaginal vault due to lack of effective triangulation of instruments. These issues led to prolonged operative times and a paucity of laparoscopic hysterectomies performed using the single incision approach in the early 2000's.

Recent advances in technology have brought SILH back in vogue. Multichannel access ports such as the SILS port by Covidien (Figure 1) allows the insertion of three 5mm to 12mm cannulas through a 3cm to 3.5cm incision in the umbilicus. This foam-based flexible port comes complete with a gas insufflation channel, ensuring minimal gas leakage. Laparoscopic dissectors that embody both functions of vessel coagulation and tissue cutting in one device, such as the Ligasure Advance, have improved the efficiency of SILH vastly. Laparoscopic Graspers that bend along the shaft, such as the Roticulator made by Covidien (Figure 3), further improves the ergonomics of the SILH procedure by eliminating a significant limiting factor in single incision laparoscopic surgery — lack of instrument triangulation.

Karl Storz has recently decided to join the fray with their S-PORTAL family of devices designed for the purpose of single incision laparoscopic surgery. Karl Storz introduced a family of reusable

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instruments to counter the very pertinent issue of cost. S-PORTAL's multichannel access ports come by the names of CUSCHIERI ENDOCONE and X-CONE, each with innovative methods for insertion. Meanwhile, triangulation of instruments is achieved with DAPRI instruments, which like the Roticulator by Covidien, has been developed to bend along the shaft of the instrument.

The initial experience and technique of both methods will be demonstrated in a video presentation. The authors will discuss the benefits and disadvantages of the SILS versus the S-PORTAL approach. The presentation will also include a summary of the various single incision laparoscopic surgery approaches available.

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Session 7 - Free Communications B 1420-1430

Z PLASTY VAGINAL RECONSTRUCTION IN CASES OF VAGINAL CONSTRICTION: A VIDEO PRESENTATION

Singh R, Carey M

Vaginal constriction and associated dyspareunia can be a complication of vaginal surgery. It can arise after repair of obstetric injuries, post hysterectomy, after vaginal reconstructive procedures with excessive trimming of vaginal mucosa. These patients require a careful assessment with pain mapping; identification of trigger points, perineal or vaginal scarring, reduced vaginal calibre or mesh complications. Any atrophy, infections and inflammations should be treated. Underlying conditions like lichen sclerosus, lichen planus or diabetes should be diagnosed and treated. A multidisciplinary approach is required. Conservative management using physiotherapy, sexual counselling as well as vaginal dilators may improve the symptoms, but surgery to correct the vaginal constriction may be necessary.

The Z plasty technique for vaginal stricture has been well described in literature. The classic Z plasty used by plastic surgeons has the advantages of improving the contour, releasing scar contracture, and relieving skin tension. It is especially useful to treat a vaginal constriction ring and increase vaginal diameter.

The Z plasty involves an incision that has central and 2 lateral limb incisions to form a Z. The lengths of the three limbs and the angles formed between the central and lateral limbs are equal. This

incision creates two triangular tissue flaps that are transposed which change the length as well as orientation of the scar. The direction of the 'Z' can be vertical or horizontal depending on the location of the stricture. It is practical in women without excessive scarring so that healthy tissue can be used for the triangular flaps. As shown in the video a central limb of the Z incision is made through the length of the constrictive scar and the lateral limbs are drawn at the 60° angle to the central limb. This is associated with a 40% gain in functional length once the flaps are transposed. The flaps are dissected out to the edge to mobilize the tissue. Underlying scar tissue is excised and hemostasis is secured. The Z arms are sutured with a delayed absorbable fine suture in a tension free closure. This technique has the advantage of increasing the dimension of the vagina without creating a midline scar or compromising the length.

It is vital that vaginal surgeons be acquainted with this procedure to treat the complication of a vaginal constriction.

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Session 7 - Free Communications B 1430-1440

LAPAROSCOPIC ANTERIOR SACROCOLPOPEXY WITH TOTAL LAPAROSCOPIC HYSTERECTOMY FOR ANTERIOR AND APICAL COMPARTMENT PROLAPSE

Cario G, Rosen D, Aust T, Chou D and Reyftmann L

In our study 'Is hysterectomy Necessary for Laparoscopic Pelvic Floor repair? A prospective study' we concluded that this 14.3% incidence of reoperation for cervical elongation meant that we favour Total laparoscopic Hysterectomy for symptomatic uterovaginal prolapse together with Laparoscopic pelvic floor repair. We also felt that it allowed us more complete reconstitution of support to the pericervical ring and much better access to the high transverse cystocoele. We had found that the anterior fornix was the major area of recurrence.

More recently the SWEC pelvic floor surgeons have moved toward the Laparoscopic Mesh Sacrocolpoexy plus TLH for major prolapse involving 2 or 3 compartments. We have also moved toward using 2 separate mesh straps applied separately to the anterior defect and the posterior defect with more extensive dissection and these



separate mesh straps are only connected at in the presacral space at the level of the sacral promontory to leave the intact vault or post hysterectomy vault suture line free of mesh to decrease the incidence of mesh exposure which appears to have been very successful. We have recently refined the procedure even further to repair the anterior or posterior compartment in isolation as well as the vault by performing a 'Anterior Sacrocolpexy'

We present a video of TLH with uterosacral suspension and anterior and middle compartment Mesh sacrocolpopexy using the V loc suture for anterior mesh attachment.

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Session 7 - Free Communications B 1440-1450

INCREASED ENDOMETRIAL THICKNESS FOLLOWING COLPOCLEISIS: A DILEMMA OF DIAGNOSIS AND TREATMENT

<u>Fleming T</u>, Cario G, Chou D, Rosen D, Cooper M, Reid G, Aust T, Reyftmann L

Colpocleisis is a procedure associated with high levels of success for management of pelvic organ prolapse, and is favoured in patients who are considered to be poor surgical candidates due to its short operative time, and low rates of morbidity and mortality. The procedure does, however, limit ability to investigate any suspected uterine pathology due to the inability to access the uterine cavity for endometrial sampling.

We present the case of a 83yo lady who had undergone a surgical colpocleisis 4 years ago, and who was referred with an incidental finding of increased endometrial thickness on USS. She had medical comorbidites including hypertension, osteoporosis, GORD and diverticular disease and as such, the preference was for minimally invasive management in order to reduce operative risks.

Hysteroscopy was attempted using vaginoscopy technique via both lateral vaginal channels, however was unsuccessful. Given the

inability to obtain tissue diagnosis, and the suggested pathology on USS, it was decided to proceed to a laparoscopic hysterectomy. The accompanying video footage demonstrates some of the technical challenges faced during this novel procedure.

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Session 7 - Free Communications B 1450-1500

LAPAROSCOPIC SACROSPINOUS LIGAMENT FIXATION USING A RETROPUBIC ANTERIOR APPROACH

Cario G, Rosen D, Aust T, Chou D, Reyftmann L

There are many procedures that have been described to treat apical prolapse with or without a uterus. The Sacrospinous ligament fixation (SSLF) was first described by Richter in 1968 using a transvaginal posterior approach and really was the first substantial support structure which provided a durable if not entirely anatomical result with native tissue only¹. One of the major problems with this technique was the high rate of anterior fornix failure. It was clear that good apical support using a posterior approach exposed the anterior compartment and therefore it was logical to support the bladder base at the same operation which would require an anterior approach. Laparoscopy has made the abdominal approach to apical prolapse more popular again and uterosacral suspension and sacrocolpexy have been extensively reported over the last 10 years. Very few studies have focused on the laparoscopic approach to Sacrospinous ligament fixation².

The first generation vaginal mesh kits made SSLF far less popular. More recently we have seen the advent of the second generation vaginal mesh kits which are based on a level 1 support to the sacrospinous ligament rather than a high level 2 support to then white line anterior to the ischial spine. They have also introduced an anterior approach to the ligament with the option of bladder base repair at the same time.

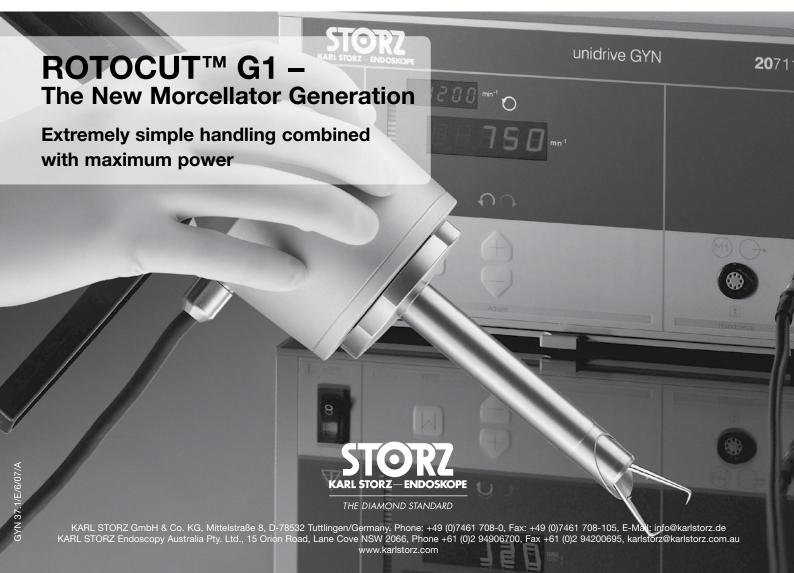
We present a short video of our technique of Laparoscopic Sacrospinous Ligament fixation using an anterior approach to provide a native tissue repair of anterior apical prolapse together with cystocele and stress incontinence.

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AUTHOR AFFILIATION: G. Cario, D. Rosen, T. Aust, D. Chou, L. Reyftmann; Sydney Womens Endosurgery Centre, St George Hospital, Kogarah, NSW, Australia.





Session 7 - Free Communications C 1350-1400

PREVALENCE OF URINARY RETENTION AND URINARY TRACT INFECTION IN PATIENTS WITH ANTERIOR VAGINAL WALL PROLAPSE AT SIRIRAJ HOSPITAL

Hengrasmee P, Krainit P, Lerasiri P

OBJECTIVE: To study prevalence of urinary retention and urinary tract infection in patients with anterior vaginal wall prolapse at Siriraj hospital

STUDY DESIGN: Cross-sectional study

MATERIALS AND METHODS: Patients attending Urogynaecology Clinic, during June and October 2010, were assessed using POP-Q classification system. Finally, a total of one hundred and forty-four patients diagnosed with anterior vaginal wall prolapse were enrolled. Each participant was requested to complete a questionnaire asking about demographic data and prolapse-related symptoms. Initial voided volume was obtained by measuring the amount of voided urine using a calibrated container. Post-void residual volume was measured using single catheterization. The catheterized urine was sent for bacterial culture.

RESULTS: Women with advanced stage of prolapse were significantly older than those with early stage (66.54 + 9.30 VS 55.28 + 11.03; p-value = 0.000) and were more likely to develop urinary retention. Overall prevalence of urinary tract infection (UTI) in women diagnosed with anterior vaginal wall prolapse was 6.9%. However, there was no significant difference in UTI prevalence (8% VS 4.5%; p-value = 0.724) when compared between early and advanced stage of prolapse. Additionally, when evaluating this UTI prevalence in terms of urinary retention, we found no correlation between these two (6.1% and 7.2%; p = 1.000).

CONCLUSION: Results from our study have demonstrated a high prevalence of urinary retention but a low prevalence of urinary tract infection in women with anterior vaginal wall prolapse. Although not statistically significant, urinary retention tended to increase with more advanced stage of prolapse. So post-void residual volume (PVR) should be measured in all patients diagnosed with anterior vaginal wall prolapse. Since the prevalence of urinary tract infection was very low, a routine urine sample for bacterial culture is not considered appropriate.

KEYWORD: urinary retention, anterior vaginal wall prolapse, urinary tract infection, initial voided volume, post-void residual volume

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Session 7 - Free Communications C 1400-1410

IDENTIFYING FACTORS ASSOCIATED WITH HAEMORRHAGE AT LAPAROSCOPIC HYSTERECTOMY

Burnet S

A retrospective review over an 11-year period was conducted where the patient suffered an intra-operative haemorrhage (defined as > 500mls blood loss) during laparoscopic hysterectomy.

The aim was to identify patient, surgical or surgeon variables that may be associated with intra-operative haemorrhage.

METHODS: The SWAPS (Sydney West Advanced Pelvic Surgery Unit) database was searched and notes reviewed where a laparoscopic hysterectomy was performed with a recorded blood loss of >500mls. Patient, surgical and surgeon factors were analysed and compared with a control group.

The patient factors of age, BMI, associated surgery, size of uterus, presence of fibroids, adhesions or endometriosis were studied, as well as surgical and surgeon factors including years in practice, years performing laparoscopic hysterectomies, technique of hysterectomy and percentage of total workload being in gynaecology.

The results of this study will help in predicting factors associated with increased risk of haemorrhage at laparoscopic hysterectomy, as well as common sites of hemorrhage.

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Session 7 - Free Communications C 1410-1420

ELEVATE MESH REPAIR FOR PELVIC ORGAN PROLAPSE: AN UPDATE OF EARLY RESULTS FROM A SINGLE CENTRE

Dunkley EJC, Patel PS, Lam A

INTRODUCTION: Elevate® mesh (American Medical Systems, Inc) was introduced in 2008. Short and long term data with respect to the safety and efficacy of this mesh system is lacking. However, encouraging six and twelve month results have been presented from the ongoing multicentre AMS sponsored trial for posterior Elevate®1.2 and retrospective case series analysis for anterior Elevate®3.

DESIGN: Prospective case series

OBJECTIVES: To update early results from a large single centre case series for Elevate® mesh repair

METHODOLOGY: All patients from Dec 14th 2009 to the present undergoing Elevate® mesh repair were included. All patients underwent standardised pre-op questioning, pre and post-op POP Q assessment and QOL questionnaires. The follow-up schedule consisted of a 6 weeks and 1 year with unscheduled checks if required. Intra-operative and post-operative complications were recorded. A prospective database was maintained.

RESULTS: There were 164 procedures performed on 108 patients. The median time since surgery has been 7.6 months. The average length of follow-up was 2.3 months (median 6 weeks) with a range of 1-14 months. There were no early mesh erosions and only 1 late mesh erosion. There were 8 patients (7.4%) who had a post-op POP-Q of stage 2. Only one of these women has required further surgery in the form of an anterior fascial repair. There was one intra-operative complication of a bladder perforation.

CONCLUSIONS: Elevate® mesh for the repair of pelvic organ prolapse appears to be safe and effective with good anatomical results in this patient series.

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Session 7 - Free Communications C 1420-1430

A PROSPECTIVE STUDY OF ELEVATE MESH KIT IN PELVIC FLOOR REPAIR

<u>Behnia-Willison F</u>, Foroughinia L, Seman E, Lam C, Bedford N, Jourabchi A, Sarmadi M, O'Shea R

Pelvic organ prolapse (POP) is a common condition in females worldwide.

We conducted a prospective study of more than 200 patients undergoing PFR for POP. All patients underwent urodynamics study and pre-operative POPQ assessment prior to the operation.

We evaluated the prolapse intra-operatively (Barber MD et al., 2009) to determine whether to use Elevate Mesh Kit, Surgisis or native tissue. Post-operative follow up visits were conducted at six weeks and then yearly, with success of each procedure measured using POPQ. Furthermore, intra-operative and post-operative complications were recorded and pre- and post- operative sexual function questionnaires were completed by patients.

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Session 7 - Free Communications C 1430-1440

UTERUS-SPARING PROLAPSE SURGERY: IS LAPAROSCOPIC REPAIR BETTER THAN THE TRANSVAGINAL APPROACH?

Patel PS, Dunkley EJC, Kaufman Y, Lam A

While the benefits of abdominal sacral colpopexy compared to vaginal sacrospinous colpopexy has been established¹, there is limited evidence to suggest that laparoscopic sacral colpopexy is superior to transvaginal mesh repair. The evidence is even scarcer when considering uterine-preservation at the time of surgery. Our objective was to compare the outcomes of laparoscopic mesh sacrohysteropexy (LSH) with transvaginal Prolift® mesh repair for uterovaginal prolapse.

This prospective cohort study included all patients who presented to our tertiary referral centre with prolapse, and underwent LSH using Gynemesh® or transvaginal Prolift® repair with an intact uterus, between November 2004 and December 2010.

Patients' responses to standardised questions on bowel, bladder and sexual function, and objective pelvic exam findings using the pelvic organ prolapse quantification (POP-Q) scale, were documented at pre-operative and routine post-operative visits at 1- and 12-months, as well as at any unscheduled visits.

The primary outcome was objective anatomic cure, defined as a POP-Q stage of ≤1. Secondary outcomes included subjective cure, operative morbidity, including, intra-operative complications, operative duration, estimated blood loss, and immediate and long-term post-operative complications, such as mesh erosions, de novo stress incontinence and dyspareunia, and re-operation rates for prolapse or incontinence.

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Session 7 - Free Communications C 1440-1450

A COMPARISON OF TWO MESH SYSTEMS FOR REPAIR OF PELVIC ORGAN PROLAPSE

Dunkley EJC, Patel PS, Lam A

INTRODUCTION: Vaginal mesh systems for the repair of pelvic organ prolapse have been used for some time now. Major benefits of these systems are a reduced rate of recurrence and vaginal stenosis. Concerns about infection and mesh erosion still exist and long term results are not available for some newer systems.

AIM: The aim of this presentation is to compare early outcomes from two different mesh systems (Prolift® and Elevate®) for repair of symptomatic pelvic organ prolapse.

METHODS: All patients receiving vaginal mesh repair for prolapse in a single tertiary referral centre underwent pre-op standardised questioning, pre and post-op POP-Q assessment and recording of intra-operative results and post-operative complications. Quality of life assessments were also made. Follow-up schedule involved review at 6 weeks and 1 year with unscheduled visits if required.

RESULTS: There were 195 Prolift® mesh procedures in 114 women with POP Q stage ≥2 pre-operatively. There was a mean follow-up of these women of 7 months. There were 164 Elevate® procedures in 108 women with POP Q stage ≥2. There was a mean follow-up of 2.4 months in this group to date. The baseline characteristics of the two groups were comparable with regards to average age, BMI, parity, sexual activity and menopausal status. Intra-operative, early and late post-operative complications will be compared as will outcomes in terms of symptom resolution and anatomical result. A difference in mesh erosion rates between the two mesh systems will be discussed.

CONCLUSIONS: Both mesh systems are safe with good overall anatomical outcomes. However, Elevate® has reduced early complications, particularly with regards to early mesh erosion, in this patient series.

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Session 7 - Free Communications C 1450-1500

OUTCOMES OF TRANSVAGINAL PROLIFT® MESH REPAIR FOR PELVIC FLOOR PROLAPSE AT CARE, SYDNEY

Patel PS, Dunkley EJC, Kaufman Y, Lam A

In 2008, we presented our centre's initial experience with the transvaginal Prolift® mesh repair technique. After two more years of experience, we provide an update on the success and complications encountered with this procedure.

This prospective analysis included all patients who underwent Prolift mesh repair at our university-affiliated tertiary referral centre up until December 2010. All procedures were performed by a single surgeon.

Cure was evaluated subjectively based on patients' answers to standardised questions regarding bowel, bladder and sexual function, and objectively by pelvic exam findings at pre- and post-operative visits using the pelvic organ prolapse quantification (POP-Q) scale. Postoperative follow-up included routine visits at 6 weeks and 12 months, as well as any unscheduled visits.

The primary outcome was objective anatomic cure, defined as a POP-Q stage of ≤1. Secondary outcomes included subjective cure, operative morbidity, including, intra-operative complications, operative duration, estimated blood loss, and immediate and long-term post-operative complications, such as mesh erosions, de novo stress incontinence and dyspareunia, and re-operation rates for prolapse or incontinence.

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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

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 deposit through cancellation of your participation in the Conference, or through reason including airline or related services strikes within and/or outside Australia, 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.

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.

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