

# Free Communications Abstracts

Thursday 22nd Best Free Communications 0950 – 1000

## Laparoscopic Hysterectomy on Patients Weighing 100 Kg or More: Experience with 23 Consecutive Patients over 6 Years.

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Obesity is normally associated with increased peri operative morbidity. Patients who have a laparoscopic hysterectomy recover more quickly than patients having an abdominal hysterectomy.

In the last 6 years 23 consecutive patients weighing 100 Kg or more who were requiring a hysterectomy, had the operation performed as a Total Laparoscopic Hysterectomy with both the uterine vessels ligated and the vagina sutured endoscopically with disposable cutter-stapling and suturing devices.

No patient required laparotomy, reoperation or readmission and there were no major complications. Means for operating time was 173 minutes; post-operative stay 2.4 days; patient weight 117 Kg. Bleeding from lateral port sites occurred in 5 (22%) with 2 requiring blood transfusions.

Laparoscopic hysterectomy is a safe method of removing uteri in large women which allows for rapid mobilization of the patient. Details:

n	date	initials	op.time	p.op.stay	Kg	complications	difficulties
1	03/04/97	SW	210	3	120	(endoclose)	
2	21/05/97	CS	360	2	175	transfusion	
3	19/06/97	MM	105	1	104		
4	11/09/97	DF	135	1	127		7cm cervix
5	18/11/98	BS	155	2	120		
6	22/02/99	PM	165	4	130	(e)bladder perforation	275g debulked
7	17/03/99	MG	230	2	130	transfusion	X6 laparotomies
8	13/05/99	SH	140	3	103		
9	02/06/99	VS	135	1	106		
10	09/06/99	LM	150	2	100		
11	19/07/99	JS	105	3	111		
12	02/09/99	CJ	135	1	117		255g+rectocele
13	30/08/00	SF	150	1	140		295g
14	04/09/00	MR	155	3	106	(Hb87)	265g
15	27/09/00	CG	240	12	105	(SPC-12days)	Full repair
16	14/02/01	HD	125	2	130		
17	22/03/01	EL	220	2	105	(Hb82)	450g-Cx fibroid
18	04/04/01	PA	225	2	127		255g+adhesions
19	04/06/01	GC	260	2	107		780g-morcellation
20	27/06/02	JS	160	2	102		endometrial ca.
21	19/09/02	EH	135	1	102		
22	05/11/02	DC	140	2	100		
23	06/02/03	KV	135	2	115	(endoclose)	

Thursday 22nd Best Free Communications 1000 – 1010

## Complications of Laparoscopic Hysterectomy: The Melbourne Experience

J. Tsaltas, P. Maher, E. Readman, A. Lawrence, M. Michael, S. Pearce  
Monash Medical Centre, Clayton, Victoria  
Mercy Hospital for Women, East Melbourne, Victoria

### Objective:

To assess the incidence and type of major complications encountered during laparoscopic hysterectomy.

### Methods:

A retrospective review of consecutive public and private patients finishing at the end of 2002. All operations were performed by Monash Medical Centre, and The Mercy Hospital endoscopic units. Operations included laparoscopic assisted hysterectomy. Indications for surgery were patients with benign conditions not suitable for standard vaginal hysterectomy. The teaching of other Gynaecologists or trainees the operative technique of laparoscopic hysterectomy occurred during many of these procedures.

### Results:

All major complications and inpatient stay rates will be presented. The major complications encountered will be discussed.

### Conclusions:

Quality assurance and operative technique can be analysed and potentially modified regarding the above complications.

### Correspondence:

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## Laparo-vaginal Hysterectomy: a Decade of Evolution

Jennifer Cook, Robert T O'Shea, Elvis I Seman, Paulette Maroun  
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Flinders Medical Centre, Adelaide, South Australia

### Objective:

To compare Laparoscopically-Assisted Vaginal Hysterectomy (LAVH) to Total Laparoscopic Hysterectomy (TLH) in terms of various hysterectomy outcome variables and to document the modifications to the technique of laparovaginal hysterectomy which have occurred over the last decade at Flinders Endognaecology.

### Methods:

Seven hundred and ninety-four consecutive women underwent hysterectomy between January 1992 and December 2001. This included 424 women who underwent TLH and 370 who underwent LAVH. The case notes were retrospectively analysed. Data extracted included age, weight, indication, surgeon, operating time, estimated blood loss, complications and length of hospital stay. Comparisons were made between LAVH and TLH.

### Results:

The rate of major complications in the TLH group was 5.7% compared to 12.5% in the LAVH group. This included a lower rate of bowel injury in the TLH group (0 vs 0.3%), a lower rate of cystotomy in the TLH group (1.4% vs 3.0%), a lower rate of excessive blood loss in the TLH group (0.7 vs 2.7%) and lower rate in non-autologous blood transfusion (1.2% vs 3.0%). The conversion to laparotomy was lower in the TLH group (1% vs 3%). A higher rate of ureteric injury was observed in the TLH group (0.7% vs 0.3%).

### Conclusions:

The evolution of laparovaginal hysterectomy from LAVH to TLH over the last 13 years has resulted in improved patient outcomes. Ongoing modification of the technique to ensure ureteric protection must remain a priority.

## Does Endometriosis Pain Alter Sensation Perception?

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<sup>2</sup>Royal Women's Hospital, Carlton,  
<sup>3</sup>Department of O&G, University of Melbourne

### Objective(s):

To see if there was a difference in sensation perception between women with endometriosis and a control group, and whether such a difference correlated with severity of pain.

### Methods:

Women with endometriosis and pelvic pain completed a symptom diary for up to 1 month prior to surgery. A control group of fertile women without symptoms or endometriosis was recruited. Both groups underwent current perception threshold testing on the cheek and in both iliac fossae within 4 days of undergoing surgery.

### Results:

There was a significant difference in sensation levels between women with endometriosis and controls on the cheek and in the right iliac fossa. On multivariate analysis the changes in sensation at the cheek correlated with maximal pelvic pain and maximal dyspareunia over the previous month.

### Conclusion:

Women with pain from endometriosis show an associated alteration in sensory perception both in the region of pain and also more globally.

Thursday 22nd Free Communications (A) 1340 – 1350

## Treatment of Endometriosis using the Argon Plasma Beam in the Awake Patient

Larry Demco M.D. University of Calgary,  
Calgary Alberta Canada

### Objective:

To determine if the argon plasma beam is an effective method of treatment of superficial endometriosis and can the treatment be done in the awake patient.

### Study Design:

Canadian Classification 11-1

### Setting:

University Hospital

### Methods:

Patients under IV conscious sedation underwent pain mapping of the lesions of endometriosis. The lesions were then treated in the awake patient using the argon plasma beam. The treated areas were then remapped to determine if the treatment was effective.

### Results:

Repeat pain mapping immediately after treatment of the lesions of endometriosis demonstrated the effectiveness of the use of the argon plasma beam for the treatment of endometriosis. 66% of patients were able to tolerate the entire mapping and treatment of the endometriosis while awake.

### Conclusion:

The argon plasma beam is an effective method of treatment of superficial endometriosis and is tolerated in the awake patient.

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Thursday 22nd Free Communications (A) 1350 – 1400

## An Age-related Symptom Set in Endometriosis

D J Kowalski, Liverpool Hospital  
M J W Cooper, Royal Prince Alfred Hospital.  
G D Reid, Liverpool Hospital

### Objectives:

To compile a symptom set in subjects with surgically proven endometriosis with respect to their age and clinical staging of their endometriosis.

### Methods:

A multi-centre cohort study. Subjects were recruited from patients undergoing diagnostic laparoscopy, found to have a histologically proven diagnosis of endometriosis. Clinical staging of endometriosis was made according to the revised American Society for Reproductive Medicine classification (ASRM 1997). Further surgical procedures and subsequent clinical findings were recorded.

### Results:

A complete socio-demographic profile of all the women in the sample will be presented including the women who was found not to have the disease. The sample represents all the cases assessed and treated by two laparoscopic surgeons practicing within five hospitals in Sydney. Also a profile of the physical health, the psychological health and the pain experienced by the women in this sample will be discussed.

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## Free Communications Abstracts

Thursday 22nd Free Communications (A) 1400 – 1410

### Laparoscopic Spectral Analysis of Endometriosis

Larry Demco M.D. University of Calgary,  
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**Objective:**

To determine if lesions of endometriosis will preferentially absorb light of the blue spectrum thus enabling the detection of microscopic disease.

**Setting:**

University based teaching Hospital

**Patients:**

Twenty five women presenting with endometriosis

**Methods:**

A specially adapted Xenon light source, which delivers a blue light at a specified frequency, was used concurrently with normal white. A laparoscope, which utilizes filters to detect the blue spectrum of light, was then coupled to the blue light source. Lesions of endometriosis were then compared using the standard white light to that of the blue light. The new lesions seen using the blue light were sampled to confirm pathology.

**Results:**

Using the standard white light, the classic black, red, and clear lesions were identified and the borders of the lesions were marked. The same lesions were observed using the blue spectrum of light. The classical lesions absorbed the blue light but the microscopic endometriosis surrounding the classical lesions were also identified. Furthermore, lesions not visible with the normal white light were also identified. Biopsies confirmed endometriosis in the newly visible lesions.

**Conclusion:**

Lesions of endometriosis preferentially absorb the blue light spectrum. Laparoscopic spectral analysis enables visualization of previously non-visible microscopic endometriosis and make classical lesion easier to identify.

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Thursday 22nd Free Communications (A) 1410 – 1420

### Endometriotic Ovarian Cysts: the Case for Excisional Laparoscopic Surgery

Panos Maouris and Lincoln Brett\*,  
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King Edward Memorial Hospital, Perth, Western Australia

**Objective:**

To review the evidence comparing laparoscopic excision with ablation for endometriotic cysts.

**Design:**

Review of the current literature.

**Background:**

Endometriotic cysts can be managed laparoscopically by stripping and excising, or ablation.

**Main outcome measures:**

Symptom relief, post-procedure fertility and cyst recurrence rates.

**Results:**

With ablative techniques, there are concerns of thermal damage to the underlying follicles, incomplete destruction of endometriotic tissue, over diagnosis of endometriosis in cases of functional haemorrhagic cysts and missed diagnosis in cases of malignancy. The limited comparative data available demonstrate that the clinical outcomes in terms of symptom relief, pregnancy rates and cyst recurrence, are significantly better with excision when compared with ablation.

**Conclusions:**

There is evidence to suggest that laparoscopic excision is superior to ablation in all the important clinical outcomes. There are also theoretical advantages of excision over ablation with no demonstrable disadvantages.

Thursday 22nd Free Communications (A) 1420 – 1430

## The Learning Curve for Hysteroscopic Sterilization: Time, Timing and Timeliness

Dr David Rosen – Sydney Women's Endosurgery Centre  
St George Hospital and Royal Hospital for Women, Sydney

The Essure Hysteroscopic sterilization was introduced into Australia in 2001 with a training model unprecedented in the field of gynaecological surgery. This paper examines the learning curve to proficiency in hysteroscopic sterilization and seeks to provide data that supports strategies to maximize successful placement, minimize complications and to benefit from the collected experience of others for those currently practicing the technique and those seeking to do so in the future.

Thursday 22nd Free Communications (A) 1430 – 1440

## Use of the Mini Hysteroscope to Directly Assess Endometrial Integrity Following Embryo Transfer

Andrew S. Murray<sup>1</sup>, Luk Rombauts<sup>2</sup>, David L. Healy<sup>3</sup>

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<sup>2</sup> Senior Lecturer, Monash University Department of Obstetrics and Gynecology, Monash Medical Centre, Clayton, Victoria, Australia

<sup>3</sup> Professor, Department of Obstetrics and Gynecology, Monash Medical Centre, Clayton, Victoria, Australia

### Objectives

To utilize state-of-the-art hysteroscopic technique to directly assess the effects of embryo transfer catheters on endometrial integrity and correlate this with difficulty of transfer.

### Design

This is a descriptive pilot study. Subjects were patients of reproductive age undergoing diagnostic hysteroscopy. A mock embryo transfer was performed by a single clinician with the same care and technique as with a normal transfer (K-soft catheter, Cook). This was immediately followed by saline hysteroscopy using a 2.7mm hysteroscope (Circon). Hegar dilators or uterine sounds were not used. Representative video

clips were recorded for independent assessment of endometrial integrity. Outcomes measured were ease of transfer (easy, moderate, difficult, very difficult) along with details of the transfer technique. Endometrial damage was independently assessed and graded as follows: none, minor, moderate, or severe.

### Results

This is an ongoing pilot study with a total of thirty patients to date. The mini-hysteroscope provides excellent images of the uterine cavity without the need for cervical dilatation. There is a clear association between damage to the endometrium and difficulty of transfer. Features seen in the endometrium even after easy transfers range from no change to bleeding from the fundus and non-bleeding furrows in the posterior wall. When the transfer is difficult more pronounced endometrial disruption and haemorrhage is observed (see video clips).

### Conclusion

To our knowledge, this is the first series to report the effects of embryo transfers on endometrial integrity as assessed by direct hysteroscopic visualisation. Previous studies have examined indirect methods of assessing endometrial integrity such as amount of blood or mucus present on the transfer catheter<sup>1</sup>, or by ultrasound<sup>2</sup>. However, it is not possible to know if blood on the transfer catheter is cervical or endometrial in origin. Although it is becoming apparent ultrasound ensures more accurate placement of transfer catheters<sup>2</sup>, it does not offer the same level of detail in assessing endometrial integrity that hysteroscopy does. Use of the mini-hysteroscope offers a unique insight into the effects of embryo transfer on endometrial integrity.

### References

- 1 Goudas V.T., Hammitt D.G., Damario M.A., Session D.R., Singh A.P. and Dumesic D.A. Blood on the embryo transfer catheter is associated with decreased rates of embryo implantation and clinical pregnancy with the use of in vitro fertilization-embryo transfer. *Fertil Steril* 1998, 70:878-882.
- 2 Woolcott R. and Stanger J. Potentially important variables identified by transvaginal ultrasound-guided embryo transfer. *Hum Reprod* 1997, 12:963-966.
- 3 Schoolcraft WB, Surrey ES, and Gardner DK. Embryo transfer: techniques and variables affecting success. *Fertility and Sterility* 2001;76:863-871.

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## Impressive Long Term Success Rates of Endometrial Resection: A Small Single Operator Series

Panos Maouris and Rosalind Jamieson,  
King Edward Memorial Hospital, Perth, WA

### Objective:

To determine the long term success rates of endometrial resection as performed by the senior author (PM) and to compare these with data in the literature.

### Design:

Questionnaire study

### Background:

There are limited data on long term success rates of endometrial resection.

### Main outcome measures:

Rates of amenorrhoea, eumenorrhoea, satisfaction, need for further operative treatment and avoidance of hysterectomy.

### Results:

There were 21 responses out of 33 patients (63.6%) who could have received the questionnaire. The average follow-up was 6 years and 7 months (range 6 to 8.1 years). The mean and median age of the responders was 41 years (range 29-52 years) at the time of the TCRE operation. Associated pathology (fibroids and adenomyosis) was present in 71%. Forty-three percent of the responders did not receive any endometrial preparation pre-operatively.

All 21 patients (100%) had experienced a reduction in menstrual flow and in 20 patients (95%) this was satisfactory whereas in one (5%) it was not.

The overall satisfaction rate with the procedure was 86% (18 out of 21).

Overall, 86% of the responders avoided a hysterectomy. There were no repeat TCRE procedures, giving the same rate (86%) for avoiding any surgery after the procedure.

Overall, 17 women (81%) stated that they would recommend the procedure to a friend.

### Conclusions:

The results compare favourably with published series and provide justification for the continued use of this procedure.

## Surgical Management of Clomiphene Resistant Polycystic Ovarian Syndrome (PCOS): A Randomised Controlled Trial of Laparoscopic Ovarian Diathermy (LOD) and Gonadotrophins

Cindy Farquhar, Neil Johnson, Guy Gudex, K Williamson.  
Fertility Plus, National Womens' Hospital, University of Auckland, Auckland, New Zealand

### Introduction:

Induction of ovulation with clomiphene citrate is successful in 70% of women with PCOS. While treatment with gonadotrophins is often successful for women with clomiphene resistant PCOS it requires a considerable investment of patient time and there is risk of ovarian hyperstimulation and multiple pregnancy. Since the advent of laparoscopic ovarian diathermy there have been several reviews and case series in the literature totalling more than 1000 patient. While ovulation rates are often reported at more than 80%, pregnancy rates vary from 20% to 66%. However, only one randomized controlled trial has been published in the peer reviewed literature which reported similar pregnancy rates for gonadotrophins and ovarian diathermy.

### Objective:

The aim of the study was to compare the effectiveness of laparoscopic ovarian diathermy (LOD) with gonadotropin ovulation induction with FSH for women with clomiphene citrate resistant PCOS.

### Methods:

A randomised controlled trial of laparoscopic ovarian diathermy with three cycles of gonadotrophins was undertaken.

### Results:

Eight of the 29 women (27.5%) who had LOD conceived during the first 6 months. Three miscarried but all conceived spontaneously in next 6 months. Another four women conceived in 6-24 month period and 11 (57%) of the 19 women who had ovulation detected conceived. Four women conceived a second time, 21 months, 30, 35 and 44 months after LOD). For 21 women who received FSH, seven conceived (33%), and three miscarried. Greater patient acceptability was higher in women who underwent

LOD. The direct costs of LOD were 50% lower than ovulation induction with FSH.

#### Conclusions:

Laparoscopic ovarian diathermy is a safe and cost-effective alternative to ovulation induction with gonadotropins. Costs were significantly increased (3 fold) in the group that received gonadotrophins compared to laparoscopic ovarian diathermy. The advantages of laparoscopic ovarian diathermy compared to gonadotrophin therapy include reduced risk of multiple pregnancy, hyperstimulation and the potential for consecutive spontaneous ovulations.

Thursday 22nd Free Communications (A) 1500 – 1510

## The Effect of Post Surgical Intraoperative Ropivacaine and an Intraoperative Gas Drain on Post Operative Pain in Patients having Laparoscopic Surgery: a Double Blind Randomised Control Trial.

Emma Readman

Many studies have shown the benefits of a gas drain on post operative pain following operative laparoscopy, but there have been equivocal results in the trials of pain relief following the instillation of local anaesthetic. We report the results of a trial to assess the benefits of the combination of a gas drain and the instillation of local anaesthetic on the incidence of pain after operative laparoscopy. Between July 2001 and April 2002, 128 patients undergoing operative laparoscopy at the Mercy Hospital for Women, E.Melbourne were recruited into a randomised control trial with four arms. One group received a blocked drain and saline; a second group were given a blocked drain and ropivacaine; a third group received a patent drain and saline; and a fourth were given a patent drain and ropivacaine. We found a statistically significant improvement in pain scores at 2 and 4 hours in the group allocated to receive a patent drain and ropivacaine.

Thursday 22nd Free Communications (A) 1510 – 1520

## Cost Effectiveness of Preoperative Gonadotrophin Releasing Analogues for Women with Uterine Fibroids Undergoing Hysterectomy or Myomectomy

Cindy Farquhar, Paul Brown, S Furness.  
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#### Objective:

To conduct a cost-effectiveness analysis of pre-operative gonadotrophin releasing hormone agonists (GnRHa) in women with uterine fibroids undergoing hysterectomy or myomectomy.

#### Design:

A cost-effectiveness analysis using the effectiveness data from a systematic review of GnRHa.

Setting: Secondary care.

#### Participants:

Women with uterine fibroids undergoing hysterectomy or myomectomy and women volunteers.

#### Methods:

Effectiveness data was used from a systematic review to construct a model and to calculate the cost per surgical outcome avoided. In order to evaluate the value women place on the outcome, a willingness to pay analysis of women volunteers was undertaken.

#### Results:

For hysterectomy, the additional cost of treatment with GnRHa was \$1190 per case. The cost of avoiding one abdominal procedure was \$4577 per case and the cost of avoiding one vertical incision was \$6263. For a myomectomy, the additional cost of treatment with GnRHa was \$1535 per case. The cost of avoiding one vertical incision was \$4651 per case. These costs exceeded the benefit women placed on the outcomes.

#### Conclusion:

Although the preoperative use of GnRHa results in benefits which include less frequent abdominal incisions in the case of hysterectomy and less frequent vertical incisions in the case of myomectomy, the benefits do not justify the costs. This study highlights the importance of considering both the benefits and costs in health care decisions.

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Thursday 22nd Free Communications (A) 1520 – 1530

### Electrosurgery and MAS: Great Disparity Between Gynaecologists in its Application

Panos Maouris and Rosalind Jamieson,  
King Edward Memorial Hospital, Perth, Western Australia

#### Objective:

To detail how gynaecologists apply electrosurgery for a variety of purposes in MAS.

#### Design:

Questionnaire study.

#### Background:

With the increased use of complex MAS techniques there has been an increase in the use of electrosurgery in recent times. The dangers involved in the use of High Frequency electrosurgical generators are well known yet most gynaecologists learn the application of electrosurgical energy on the job, without any formal training. In a recent study from Monash<sup>1</sup> none of 16 gynaecologists tested could successfully answer all four electrosurgery questions and only half passed the practical "diathermy station".

#### Main outcome measures:

Gynaecologists use of monopolar versus bipolar and "cut" versus "coag" setting, type of instrument used and typical power setting for a variety of practical application scenarios.

#### Results:

There is great disparity between gynaecologists in the application of electrosurgery for common clinical scenarios. This disparity is greater in some scenarios (e.g. ablation of endometriosis) than others (e.g. haemostasis of uterine artery at laparoscopic hysterectomy) .

#### Conclusions:

There is an obvious need for formal training and consensus guidelines in electrosurgery.

#### References:

- 1 Mayoaran T et al. Educational model for an objective assessment of operative laparoscopic skill. *Gynaecological Endoscopy*, 2002;11: 59-60.

Thursday 22nd Free Communications (B) 1330 – 1340

### A Ten Year Experience of Laparoscopic Colposuspension:

Michael Wynn-Williams, R.O'Sullivan, Y.Fong, A.Lam  
Centre for Advanced Reproductive Endosurgery, North Shore Private Hospital, Sydney University.

#### Introduction:

Laparoscopic urogynaecology started to develop following the first report of a laparoscopic colposuspension in 1991. The place of laparoscopic treatment of urinary incontinence has started to be established and, as for all new techniques, case reports, case series and small randomized studies have been reported. Larger randomized studies with adequate power have yet to be reported. There are doubts that they will ever occur, therefore large observation studies are required. The authors report on their experience of performing Laparoscopic Colposuspension from 1993 to the present date.

#### Methods:

A retrospective note review was performed as preliminary step in a long term prospective follow up study of patients who had Laparoscopic Colposuspension performed or supervised by the author AL. Patients were identified in operating dairies and their notes reviewed independently. Pertinent demographic data, preoperative history, clinical findings and investigations were recorded. Intraoperative details, and post operative findings were noted.

#### Results:

A total of 208 patients had Laparoscopic Colposuspension performed over a 10 year period. 171 (82%) of patients had urodynamics (132 (77%) GSI, 39 (23%) Mixed, ). There was a mean age of 52.3 (SD 11) years. 61 patients had Laparoscopic Colposuspension alone performed, 39 had Laparoscopic Colposuspension and prophylactic McCall and a further 130 had other procedures (Laparoscopic Hysterectomy McCall Culdopalsty, Anterior Repair, Posterior Repair, Perineorrhaphy) performed simultaneously. There were 6 intraoperative complications, including 3 blood losses greater than 500mls, 1 stitch in the bladder, 1 converted to laparotomy and 1 severe bronchospasm. The mean follow up was 10.4 months. Eight women developed voiding dysfunction , 2 had severe constipation, 10 had urinary tract infection. A total of 22 women developed de novo DI and 11 had recurrent urinary incontinence. 12 patients went on to have further

pelvic floor surgery. A total of 197 (94.7%) patients had subjective cure.

#### Conclusions:

In this series of Laparoscopic Colposuspension performed over a ten year period a high subjective cure rate ( 94.7% ) and a low complication rate (12%) were seen.

Voided volumes decreased (314 (SD 224.1) vs. 274 (SD 168.6) ml,  $p= 0.11$ ) as did residual volumes (80.7 (SD 116.7) vs. 45.7 (SD 55.6) ml,  $p< 0.001$ ).

#### Conclusion:

A highly significant drop in flow rates and flow rate centiles was observed after TVT placement. However, it appears that there is slow improvement in voiding postoperatively which seems to continue over several years. This is manifest in reduced residual urine volumes, normalized voided volumes and increased maximum flow rate centiles.

Thursday 22nd Free Communications (B) 1340 – 1350

## Voiding Function after TVT

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#### Objective:

The TVT is an anti-incontinence procedure that has been shown to significantly reduce urine flow rates and flow rate centiles. Part of its success may be due to urethral obstruction. In a prospective study, we evaluated voiding function with independent flowmetry and estimation of residual urine volumes.

#### Methods:

308 assessments were carried out on 145 patients in the context of a yearly external clinical audit. Of those women, 108 have now been seen at least twice after TVT placement. After an interview and clinical stress test, the patient was asked to void for flowmetry. Residual urine was determined either by translabial ultrasound or, in cases of estimates over 100ml, by catheterization.

#### Results:

Compared to preoperative flow rates, a highly significant drop was observed after TVT (max. flow rate 30.57 (SD 14.27) vs. 20.75 (SD 12.57) ml/s, max. flow rate centile 49.66 (SD 32.45) vs. 22.86 (SD 23.56), both  $p< 0.001$ ). The first postoperative flowmetry was undertaken on average 0.62 (0.2- 1.8) years, the last on average 2.63 (1- 4.5) years after TVT. The interval was 2.02 years on average. There was a significant increase in maximum flow rate centiles over this period of time (20.07 (SD 20.83) to 24.92 (SD 23.94),  $p= 0.021$ ). This increase appeared to be virtually linear over time when analysed by ANOVA.

Thursday 22nd Free Communications (B) 1350 – 1400

## Laparoscopic Enterocele Excision using McCartney Tube: A Three Year Evaluation

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Flinders Medical Centre, Adelaide, South Australia

#### Objective:

To describe the procedure of laparoscopic enterocele excision using the McCartney tube® and define its role in the treatment of genital prolapse.

#### Method:

A prospective review of 38 patients from February 2000 to February 2003. Pre-operatively, prolapse was qualified into an attachment or fascial defect at Delancey level I, II or III.1 Each case was then quantified by POPQ system of prolapse assessment. Each patient underwent Laparoscopic Excision of enterocele sac and vault suspension (Lyons and Liu)<sup>2</sup> in isolation or in combination with other laparovaginal pelvic floor repair procedures. Postoperative assessment involved POPQ staging at 6 weeks and then six monthly.

#### Surgical procedure:

A 35mm McCartney Tube® is inserted in the vagina. The pneumoperitoneum causes the invagination of the enterocele sac into the tube and defines the sac margin. The sac and a small amount of healthy vagina

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are excised using either monopolar diathermy. Healthy pubocervical fascia is approximated to healthy rectovaginal fascia with two to three figure of eight sutures of 0 monocryl.

### Results:

The total rate of major complications was 5.3%. This included one case of bowel injury and one case of bladder injury. The most common minor complications were UTI (15.3%), prolonged retention 13.2% and ileus 5.3%. The mean duration of hospital stay was 4.8 days (range 3-7). After follow-up at 3 years, there were three cases of recurrent enteroceles – objective success rate 92.1%.

### Conclusion:

Short term follow-up demonstrates that the McCartney Tube® facilitates management of this difficult gynaecological problem.

### References:

- 1 DeLancey JOL. Anatomic aspects of vaginal eversion after hysterectomy. Am. J. O&G. 166:1717-24, 1992.
- 2 Liu CY (ed.): Laparoscopic Hysterectomy and Pelvic Floor Reconstruction. Massachusetts, Blackwell Science, 1996.

Thursday 22nd Free Communications (B) 1400 – 1410

## Laparoscopic Pelvic Reconstructive Surgery for Utero-vaginal Prolapse

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North Shore Private Hospital,  
Sydney University and  
University of New South Wales.

### Introduction:

The anatomy, pathophysiology and treatment of pelvic organ prolapse has significantly evolved over the past decade due to increased appreciation of pelvic functional anatomy and the rapid advancement in laparoscopic surgery. With the appreciation of pelvic patho-anatomy come surgical approaches directed toward site-specific defects and anatomical resuspension of the prolapsing organs.

### Methods:

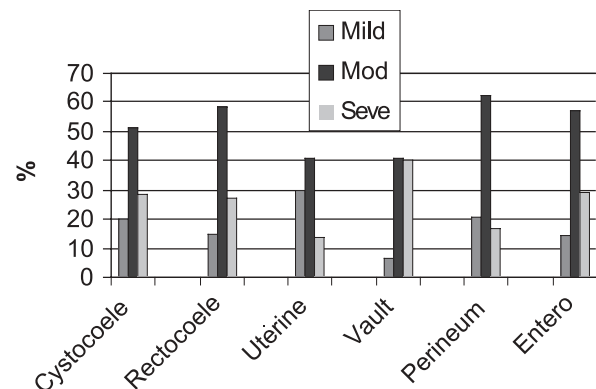
A consecutive series of women undergoing pelvic reconstructive surgery between 1995 and 2001 were

reviewed. Patients details were identified from operating logs. Demographic, symptomatic and examination findings were recorded at baseline and repeated again post-operatively as part of a longitudinal follow-up project.

### Results:

A total of 356 pelvic reconstructive procedures were performed. The mean age of the patients was 56.7 years (SD 12.1). Pre-operative symptoms are listed in table a and clinical findings are summarised on table 2. These procedures are divided broadly into 2 categories, 251 laparoscopic vaginal reconstructions and 105 uterine re-suspensions. Of the vaginal reconstructions there were 52 level I, 164 level II and 31 level III repairs and of the uterine resuspensions 36 were level I, 64 were level II and 6 level III.

Complaint	No.
Prolapse	275
Urinary Incontinence	150
Pelvic Discomfort	40
Constipation	62
Faecal Incontinence	18
Urinary Frequency	36
Dyspareunia	15



The short and long term results will be presented.

## Laparoscopic Suture Sacral Hysteropexy

Hannah Krause, Judith Goh, Kate Sloane, Marcus Carey  
Dept Urogynaecology, Royal Women's Hospital, Melbourne

### Aims:

The aims of this study are to describe the surgical methods of laparoscopic suture sacral hysteropexy and to present the short-term results of this procedure.

### Methods:

#### Surgical Technique

Bowel preparation was completed by all women prior to surgery. The woman was placed in a low lithotomy Trendelenburg position and a 12F Foley catheter was placed into the bladder. A uterine manipulator was used. A Hasson entry was used to introduce the 10-mm laparoscope. Three 5-mm ports were then inserted - 1 suprapubically in the midline and 1 at each iliac fossa.

The course of both ureters was identified. A Moschcowitz culdoplasty was performed as required. Using the uterine manipulator, the uterus was acutely anteverted and anteflexed. A 1 Prolene suture (Ethicon) was used to perform the hysteropexy. The Prolene suture was initially placed into the left uterosacral ligament about 3 cm from its insertion into the posterior cervix. Using a running suture technique, the Prolene stitch was inserted into the left uterosacral ligament, towards the cervix, then into the posterior aspect of the cervix at the insertions of uterosacral ligament and then along the right uterosacral ligament to the sacral promontory. The sacral promontory was visualised, ensuring that no vessels were present at the site of suture placement into the longitudinal ligament of the sacrum. Following insertion into the sacral ligament, a running stitch was again employed along the right uterosacral ligament back towards the cervix. The suture was tied using knot pusher. Routine cystoscopy was performed to ensure ureteric patency.

### Results:

#### 6 months

31 women were eligible for post-operative follow-up of 6 months. 25 (81%) of the 31 women returned for follow-up. There was 1 (4%) recurrent prolapse (uterine) and this woman elected to undergo further surgery. 12-month follow-up will be presented.

### Conclusion:

Laparoscopic sacral suspension of the uterus appears to be effective in the management of uterine/vault prolapse. Long term follow-up is required.

## Laparoscopic Colposuspension versus Urethropexy: A Case Control Trial

H.P. Dietz, P.D. Wilson<sup>#</sup>, T.G. Vancaillie<sup>\*</sup>  
Royal Prince Alfred Hospital & <sup>\*</sup>Royal Hospital for Women, Sydney, & <sup>#</sup>Dunedin Hospital, Dunedin, New Zealand

### Objective:

Laparoscopic colposuspension (LC) was first described in the early 90's as a technique distinct from open Burch colposuspension. Subsequently however LC was closely modeled along the Burch technique, and the distinct features of the original 'urethropexy' (UP) were largely disregarded. In this case-control series the authors aimed to compare a standard LC technique with urethropexy +/- paravaginal repair.

### Methods:

Patients after LC (performed by/under supervision of PDW) or UP surgery (performed by/under supervision of TGV) were invited for review by HPD. Appointments consisted of a standardized interview and translabial ultrasound performed supine after bladder emptying.

### Results:

50 pairs of patients after UP and LC were matched for age, BMI, previous surgery, preexisting urge incontinence and length of followup (1.01 (0.02- 3.54) years for LC and 0.97 (0.06- 3.55) years for UP). There were no significant differences for subjective cure of stress incontinence (80% for UC, 74% for LC), postoperative urge incontinence (34% for UC, 28% for LC), frequency (12% for UC, 6% for LC) and nocturia (18% for UC, 10% for LC). Significantly more UP patients complained of voiding dysfunction (15/50 vs. 4/45,  $p = 0.01$ ).

Significant differences (all  $p < 0.001$ ) were found for proximal urethral rotation (16.9 (SD 10.8) degrees for LC vs. 44.6 (SD 31.8) degrees for UP), position of the bladder neck on Valsalva (17.72 (SD 6.4) mm for LC vs. 6.7 (SD 10.6) mm above the symphysis pubis for UP,  $p < 0.001$ ) and bladder neck descent on Valsalva (8.7 (SD 5.3) mm for LC vs. 20.0 (SD 10.8) mm for UP).

### Conclusions:

Both procedures were shown to be effective in curing stress incontinence. The incidence of bladder symptoms was roughly comparable, with the exception of voiding difficulty. Significant differences were observed regarding anatomical appearances, with urethropexies showing more recurrent hypermobility.

## Free Communications Abstracts

Thursday 22nd Free Communications (B) 1430 – 1440

### Vaginal Skin Grafts: A Revival of an Old Idea to Treat Enterocele

Jennifer Cook, Elvis I. Seman, Robert T O'Shea  
Flinders Endognaecology, Flinders University, Flinders  
Medical Centre, Adelaide, South Australia

The concept of using excised vaginal epithelium as a free full-thickness skin graft to reinforce a vaginal repair was suggested to Mr Leslie Gleadell and first used in 1952 at the Royal Melbourne Hospital. In 1992, Dr Robert Zacharin reported on a series of 24 patients in whom full thickness skin grafts had been used in the treatment of recurrent prolapse of the anterior or posterior vaginal wall.<sup>1</sup> Thierry Vancaille was the first to describe the application of skin grafts in laparoscopic surgery to correct enteroceles.<sup>2</sup> The vaginal skin graft was attached laparoscopically to the USL.

We now report on the use of free full-thickness vaginal epithelium graft in the correction of large enteroceles. The aim of an apical vaginal epithelium graft is to reinforce the vaginal vault apex with autologous tissue. Level I fascial integrity is restored and this reduces the incidence of recurrent enterocele sac formation.

#### References:

- Zacharin RF. Free Full-thickness Vaginal Epithelium Graft in Correction of Recurrent Genital Prolapse. *Aust NZ J Obstet Gynaecol.*, 1992;32(2):146-8
- Liu CY (ed.): Laparoscopic Hysterectomy and Pelvic Floor Reconstruction. Massachusetts, Blackwell Science, 1996

Thursday 22nd Free Communications (B) 1440 – 1450

### The Effect of Childbirth on Levator Function

H. P. Dietz, A.B. Steensma\*  
Royal Prince Alfred Hospital & Royal Hospital for Women,  
Sydney, Australia

#### Objective:

Vaginal childbirth is assumed to impact on levator function due to direct trauma and/ or neuropathy. In this study the authors intended to assess levator function by ultrasound prior to and after delivery and correlate changes with delivery information.

#### Methods:

200 nulliparous women were seen at 6-18 weeks' gestation, at 32- 37 weeks' gestation and 2-5 months postpartum. Appointments consisted of an interview, paper towel test, flowmetry and translabial ultrasound (supine and after voiding). The most effective of at least 3 contractions was used for evaluation according to a previously published method quantifying cranioventral displacement of the bladder neck. Labour and delivery details were collected through data collection sheets and the institutional database.

#### Results:

173 women were seen in late pregnancy; 169 returned on average 93 days postpartum. At the last visit, a significant reduction of cranioventral lift from 11.2 (StD 4.5) mm to 8.8 (StD 4.2) mm was noted ( $p < 0.001$ ). This reduction correlated weakly with active 2<sup>nd</sup> stage (Spearman's  $r = -0.196$ ,  $p = 0.013$ ), passive 2<sup>nd</sup> stage ( $r = -0.15$ ,  $p = 0.059$ ) and total duration of 2<sup>nd</sup> stage of labour ( $r = -0.225$ ,  $p = 0.004$ ). Caesarean section seemed weakly protective ( $-2.87$  mm vs.  $-1.17$  mm,  $p = 0.031$ ) relative to vaginal delivery. Operative vaginal delivery resulted in a more marked reduction in measurements ( $-3.83$  mm vs.  $-1.17$  mm for caesarean section,  $p = 0.022$ ).

#### Conclusions:

Childbirth reduces bladder neck displacement on levator contraction. The main factor affecting levator function seems to be length of 2<sup>nd</sup> stage, both active and passive. A Caesarean Section in 2<sup>nd</sup> stage appears to exert no protective effect relative to any form of vaginal delivery. Consequently it may be speculated that it is not crowning but full engagement of the fetal head and its duration that impairs levator function.

Thursday 22nd Free Communications (B) 1450 – 1500

### Bipolar Electrosurgery for Haemostasis of Vascular Pedicles: to "COAG" or to "CUT"?

Panos Maouris and Fred Busch,  
King Edward Memorial Hospital, Perth, WA

#### Objective:

To review the evidence on what is the most appropriate mode of current to be used for electrosurgical haemostasis.

**Design:** Review of published literature

**Background:**

There is great disparity between gynaecological laparoscopists' use of the "CUT" and "COAG" mode for bipolar haemostasis.

**Main outcome measures:** Histological effects on tissue

**Results:**

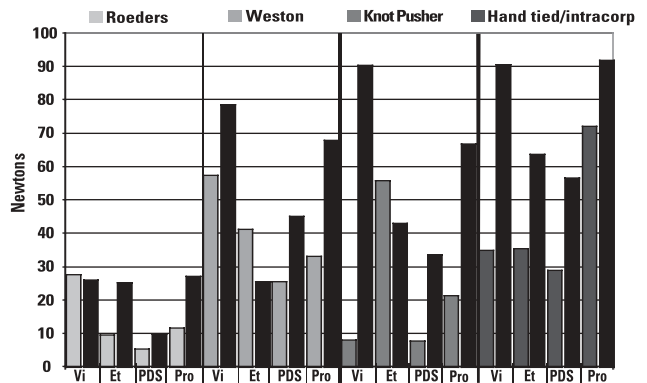
Richard Soderstrom's classic studies on the pathogenesis of tubal sterilization failure clearly demonstrate the histological differences between the use of "CUT" and "COAG" mode for bipolar electro-surgery. Other studies on the histological effects of bipolar electro-surgery, lateral thermal spread and other safety factors will also be reviewed.

**Conclusions**

"CUT" coagulates (achieves haemostasis) better than "COAG".

blood soaking on the mean tension of slippage of various knots and suture materials. Several of the knots performed better when wet or blood soaked especially the braided sutures.

These results will be presented.



Thursday 22nd Free Communications (B) 1510 – 1520

Thursday 22nd Free Communications (B) 1500 – 1510

## The Influence of Wetting and Blood Soaking on the Integrity and Resistance to Slippage of Laparoscopic Knots.

Ray O'Sullivan, Michael Wynn-Williams.  
Sydney Women's Endosurgery Centre, University of New South Wales, Centre for Advanced Reproductive Endosurgery

**Introduction:**

Knot security is integral to many aspects of laparoscopic haemostatic and tissue approximation techniques. Several studies to date have examined the geometry, resistance to slippage and tensile characteristics of various laparoscopic knots on a variety of suture materials. No studies to date have examined the effects of wetting the suture material or indeed soaking them in blood.

**Methods:**

A variety of commonly used sutures were tested (Vicryl, Ethibond, PDS and Prolene Metric O). All the sutures were divided into 3 groups, dry, soaked in water or soaked in porcine blood. All knots were stored for 12 hours prior to testing. Roeder, Weston and square knots (intra- and extracorporeal) were formed on the sutures. Knot resistance to slippage was tested on an Instron 4200.

**Results:**

The graph following demonstrates the effects of

## From HUM to HUMPHREY

Dr Jiwan Steven Singh  
Perth Gynae Innovations Group (PGIG)

**Video Contents:**

The video will show the set up for HUMPHREY (Handsfree Uterine Manipulator Pelvicprobe Holder for Robotic Endoscopy) and its manipulation by the Gynaecologist during a laparoscopic operation. Last year, the Handsfree Uterine Manipulator (HUM) was awarded the best invention. It was designed to hold the Uterine Manipulator at laparoscopy, thus replacing the pelvic assistant.

With laparoscopic pelvic floor repairs and endometriosis resection, the need for a second probe holder to hold the rectal probe, necessitated the development of a second arm to the HUM, thus evolving it to HUMPHREY.

To make it more user friendly, we have changed the attachment to the operating table, and evolved the mechanisms of the probe holders. The autoclavable probe holders drop easily into the bed rail attachment on the operating table.

With HUMPHREY, we now have a 2 arm pelvic assistant, not unlike a human assistant (who are in short supply and often unwilling), to hold and manipulate the vaginal (or uterine) probe and the rectal probe at laparoscopy. Insertion of the 2 probes and their attachment to HUMPHREY'S arms will be shown in the video.

singhmed@yahoo.com.au

## Ureter Safety in Total Laparoscopic Hysterectomy: A Radiological Study with a New Generation Device – Singh Uterine Cannula (SUC) and Vaginal Funnel

Krishnan Karthigasu, Lincoln Brett, Jiwan S Singh, Justin Vivian, James Black

Ureter injury in gynaecological surgery is of great concern to gynaecological surgeon as it not only adds morbidity to the patient requiring further investigations and surgery, but also has major medico-legal consequences.

The majority of unintentional ureter injuries (up to 75%) occur with gynaecological surgery (Dowling, Goodno). Some reviews have shown that one of the laparoscopic procedures at greatest risk is laparoscopic hysterectomies (Harkki-Siren) with risk rate up to 1.3% compared to 0.3/1000 overall in operative laparoscopic surgery.

In laparoscopic hysterectomies there are a number of surgical principles performed to reduce the risk of ureter injury. Most of these are based on the same principles with open hysterectomies and include careful dissection around the adnexa to prevent injury at the infundibula-pelvic ligament, anteversion of the uterus to reflect the ureter laterally, skeletalisation of the uterine pedicle and careful dissection of the vagina. None the less ureter injuries still occur.

Our group have been using the SUC and vaginal funnel device for a number of years with greater than 300 cases of total laparoscopic hysterectomy being performed using the device. We have found that the SUC and vaginal funnel device aids the efficiency and safety of a TLH for a number of reasons and particularly aids in the safety of the ureter around division of the uterine pedicle and at the vaginal angle, due to the fact that the SUC manipulates the uterus and the rotating funnel has an anterior edge, elevating the vaginal fornices. The aim of the present study is to demonstrate this radiologically.

### Aim:

To show radiologically, that use of the Singh Uterine Cannula (SUC) and Vaginal Funnel reflects the ureter further laterally than when the uterus in its natural state, the uterus in an anteverted state and a uterus with a vaginal probe in it. Thus leading to a potential reduction in ureter injuries around the level of the uterine vessels and vaginal angles when performing total laparoscopic hysterectomies.

### Method:

A number of patients (exact number approx 10 at completion of trial in April 2003) who have no pelvic abnormality (eg- endometriosis, fibroids, adnexal pathology), normal sized uterus, who are having total laparoscopic hysterectomy for dysfunctional uterine bleeding are enrolled with their consent.

The patients are their own controls to allow for natural anatomical variations of the course of the ureter in individuals.

Radio-opaque ureteric catheters are inserted cystoscopically by a specialist urologist into both ureters at the beginning of the case and advanced to 15cm i.e. above the level of the uterine vascular supply and vaginal angles. X rays are taken in 4 different scenarios per patient at the beginning of the case- 1) with a dilator in the cervix and the uterus in its natural position (named p Natural), 2) with a spackman uterine manipulator and the uterus in anteversion (named S anteversion), 3) with the SUC and vaginal funnel device inserted and the uterus in anteversion (named SUC anteversion), 4) with the funnel in the vagina only and no uterine manipulation, (named F natural). After these radiological pictures are taken the ureteric catheters are removed and the laparoscopic hysterectomy continues as per normal technique for the surgeon.

Radiological measurements are taken from the mid cervix level as indicated by the dilator with the p natural position, the spackman in the S anteversion position, the Singh uterine manipulator in the SUC position and the F natural shot superimposed over the SUC position shot. This point should be constant for the case as it is the middle cervix position for all types of cervical probe and the diameter of the probes are similar.

Measurement are made from the central cervical canal (at the level of the vaginal fornix) to the ureter and recorded by the radiologist, blinded to the surgery and the patient.

### Results: To be presented

Measurements from the central cervical canal to the ureter are recorded for each patient in the four different states and presented in table form

The average difference in distance from central cervical canal to the ureter in the four states will be presented in graphical form.

Statistical analysis will be performed to assess if there is a statistical difference in ureter distance using different uterine and vaginal manipulation.

### Conclusion:

This study radiologically illustrates the use of the SUC and vaginal funnel device further reflected the ureter lateral compared to, the natural state of the uterus, anteversion of the uterus and the uterus with a funnel in the vagina. Thus increasing the safety in

performing a total laparoscopic hysterectomy using this device and potentially reducing the ureter injury rate. Given that ureter injury is uncommon long term prospective studies using the SUC and vaginal funnel are required to demonstrate a reduced ureter injury rate clinically with the routine use of this device in performing total laparoscopic hysterectomy.

Friday 23rd Free Communications (A) 1340 – 1350

## Double J Ureteric Stent Extrusion Mimicking as Recurrent Uretero-vaginal Fistula: Case Report

Y F Fong, M Wynn-Williams, R O'Sullivan, A Lam

A 47 year old, para 3, presented with problems of menorrhagia and vaginal laxity. She had multiple fibroids enlarging the uterus to 14 weeks' size and was also found to have a rectocele and deficient perineum. She underwent a total laparoscopic hysterectomy with conservation of both ovaries and was also found to have endometriotic nodules on both left and right broad ligaments, uterosacral ligaments and in the utero-vesical fold. Laparoscopic excision of endometriotic disease was performed after identification and isolation of both ureters and a posterior repair done. Check cystoscopy revealed normal urine flow through both ureteric orifices. She then presented on post-operative day 10 with watery discharge per vaginum. A delayed diathermy injury causing a uretero-vaginal fistula was suspected and she was managed by the urologist with insertion of a DJ stent. She remained dry with the DJ stent in-situ but presented \_\_\_ weeks later again with a sudden gush of urine per vaginum. CT scan together with intravenous pyelogram made a presumptive diagnosis of recurrent uretero-vaginal fistula. She then underwent examination under anaesthesia with laparoscopy and cystoscopy which showed normal pelvis with intact bladder. The course of the right ureter was traced which was normal and functionality confirmed with indigo carmine dye seen from the ureteric orifices with no other spillage seen. The DJ stent however, was not seen and a second re-inserted. On review of the CT films, however, it was evident that the DJ stent had slipped out of the urethra and into the vagina, thus mimicking urine discharge. The patient had later removed the stent herself but failed to inform the doctors.

Friday 23rd Free Communications (A) 1350 – 1400

## Revival of an Old Idea to Treat Cystocele

Jennifer Cook, Elvis I. Seman, Robert T O'Shea  
Flinders Endogynaecology, Flinders University, Flinders Medical Centre Adelaide, South Australia

Historically, anterior colporrhaphy with midline plication is known to have a high failure rate. In the early 1900s, George White described transvaginal reattachment of the anterior vaginal fornix to the Arcus Tendineus as a form of treatment for cystocele. In the 1980s, Richardson demonstrated that cystoceles are a result of a break of the pubocervical fascia from its peripheral attachments or a break inside the fascia itself.

We describe the application of free transfer of full thickness vaginal epithelium in the laparo-vaginal approach to pelvic floor repair.

Our current Laparo-vaginal approach to this problem is a two stage repair comprising:

- 1 Laparoscopic repair addresses attachment defects. This ensures the necessary intact Level I and II support.
- 2 Anterior colporrhaphy and full thickness free tissue transfer will treat Level II anterior fascial defects.

The use of full thickness vaginal epithelium represents a viable alternative to mesh with its associated problems of ulceration and infection, necessitating removal.

Friday 23rd Free Communications (A) 1400 – 1410

## The Learning Curve for Laparoscopic Colposuspensions

R. O'Sullivan, M Wynn-Williams, G.Cario , M.Carlton  
University of New South Wales, Sydney Women's Endosurgery Centre, St George Hospital, Kogarah

### Introduction:

A recent Cochrane Review concluded that laparoscopic colposuspensions had not equaled or superceded the open procedure as the 'gold standard'

## Free Communications Abstracts

in the treatment of female urinary incontinence. Many of the papers contributing to this conclusion have involved surgeons of varying ability and experience.<sup>1</sup> The learning curve for the procedure has not been defined, but in some studies surgeons early in their experiences have recruited patients<sup>2</sup>. The real learning curve has never been adequately estimated.

### Methods:

The case and operative notes of a consecutive series of women undergoing laparoscopic burch colposuspensions at Sydney Womens Endosurgery since 1993 were reviewed. Features such as operating time, blood loss, intra- and post-operative complications were noted. This data was analysed on a year on year basis.

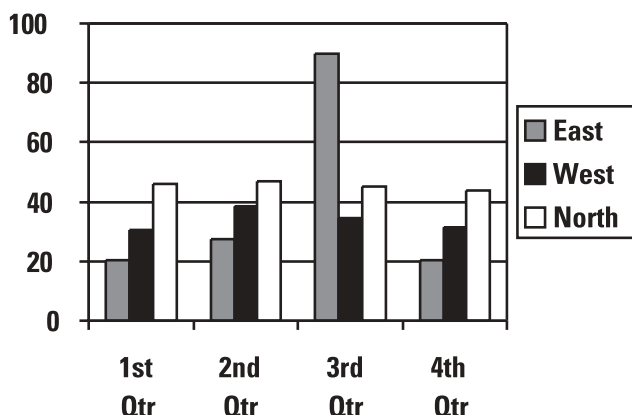
### Results:

Since 1993 the authors (GC,MC) have performed a total of 336 laparoscopic burch colposuspensions procedures. Table 1 demonstrates the percentage major (conversion, bladder perforation, haemorrhage) and minor (UTI, Urge, wound problems) complication rates experienced over this time.

It would appear from this data that the approximately 70 procedures are required (in the hands of experienced laparoscopic surgeons), before major complication rates are reduced to a steady and acceptable level.

### References:

- 1 Smith AR, Stanton SL. Laparoscopic colposuspension. *Br J Obstet Gynaecol* 1998; 105(4):383-384.
- 2 Moehrer B, Ellis G, Carey M, Wilson PD. Laparoscopic colposuspension for urinary incontinence in women. *Cochrane Database Syst Rev* 2002;(1):CD002239.



Friday 23rd Free Communications (A) 1410 – 1420

## Laparoscopic Pelvic Floor Repair: A Four Year Evaluation

Jennifer Cook, Elvis I. Seman, Robert T O'Shea, Paulette Maroun

Flinders Endogynaecology, Flinders University, Flinders Medical Centre, Adelaide, South Australia

### Objective:

To present the cumulative experience at Flinders Endogynaecology of Laparoscopic Pelvic Floor Repair (PFR) to treat genital prolapse.

### Method:

A retrospective review of 245 patients covering the period February 1999 to February 2003. Cure is defined in terms of restoration of anatomical structure and function. Each prolapse was quantified objectively pre- and post-operatively by the POPQ<sup>1</sup> system of prolapse assessment. Patients were reviewed pre-operatively and at 6 monthly intervals post-operatively.

### Results:

The average operating time was 139 min (range 30-390). The total rate of major complications was 5.7%. The mean duration of hospital stay was 4.4 days (range 1-18). After follow-up at 4 years, the objective cure rate is 89%. The average time for recurrent prolapse to emerge is 9 months. The most common site for prolapse to recur is the anterior wall. There is a 13% incidence of asymptomatic cystoceles, of which one-third become symptomatic and require surgical repair.

### Conclusion:

This study represents the largest series of objectively evaluated laparoscopic pelvic floor repair procedures in the literature. The use of the POPQ system of prolapse evaluation to achieve a true appreciation of anatomical defects and facilitation of a site specific rather than blanket approach is emphasised. We have demonstrated objectively that laparoscopic PFR remains an integral component in the effective management of genital prolapse. Evolution of the technique must concentrate on anterior wall prolapse.

### References:

- 1 Bump RC, Mattiasson A, De Brubaker LP, et al. The standardization of terminology of female pelvic organ prolapse and pelvic floor dysfunction. *American Journal of Obstetrics and Gynecology* 1996; 175:10-17.

## A 5-10 Year Follow-up of Laparoscopic Burch Colposuspension

R. O'Sullivan, M. Wynn-Williams, G. Cario, M. Carlton  
University of New South Wales, Sydney Women's  
Endosurgery Centre, St George Hospital, Kogarah

### Introduction:

Laparoscopic Burch Colposuspension for the treatment of urinary stress incontinence is gradually becoming a part of urogynaecological practice in many units. However, its true value remains controversial, primarily due to doubts about whether the laparoscopic route replicates the open procedure and whether the short and long term results are comparable.

### Methods:

Since 1993 Sydney Women's Endosurgery Centre has been performing laparoscopic Burch Colposuspensions. During this time a standardised questionnaire has been administered at the time of pre-operative urodynamics. The case notes and standardised questionnaires of patients operated on between 1993 and 1998 were reviewed. This same questionnaire and clinical assessment is being administered to these patients.

### Results:

A total of 170 Laparoscopic Burch Colposuspensions were performed by the authors (MC,GC) between Jan 1993 and Jan 1998. Their mean age was 49.3 years (SD13.3yrs), with a mean parity of 2.4 and a symptom duration of 3.2 yrs. Baseline urodynamics revealed that 75% had pure GSI, 25% had a mixed diagnosis. Mean urethral closure pressure was 51cmH<sub>2</sub>O, Q<sub>max</sub> 37.7 mls/sec and max cap 477mls. Quantitative data pertaining to pad usage and frequency/symptoms were recorded. Patients have been mailed a repeat questionnaire and requested to return for follow-up. The results are to be presented.

## Laparoscopic or Trans-anal Repair of Rectocele? A Matched Cohort Study

M. Thornton, R. O'Sullivan, M. Wynn-Williams, D. King, D. Lubowski, A. Lam  
Division of Womens and Childrens Health/ Division of Surgery St. George Hospital, Kogarah

### Purpose:

The aim of the study was to analyze the functional and physiological outcome of patients undergoing laparoscopic rectocele repair compared to a matched cohort repaired transanally.

### Methods:

40 patients, median age 58 (37-78) with pre-operative defecography, anorectal physiology, bowel function and symptom assessment undergoing a laparoscopic repair of a clinically significant rectocele were analyzed. This group were matched to 40 patients with the same pre-operative parameters, who underwent a transanal repair. At a median follow-up of 17 months patients were assessed with bowel, urological and sexual function questionnaires, physical assessment and anorectal manometry.

### Results:

74% of patients reported a significant improvement in obstructive defecation symptoms. Clinical and symptom analysis suggested a trend toward a greater improvement in those repaired laparoscopically. There was a statistically significant increase in post-operative faecal incontinence and dyspareunia in those repaired transanally. Manometric assessment revealed a significant decline in both resting and squeeze anal pressures. Pre-operative defecographic parameters, signs of anismus, duration of symptoms and age had no impact on symptoms. Decline in continence was greatest in those repaired transanally with a significant obstetric history and a history of previous perineal surgery.

### Conclusions:

Laparoscopic repair of a clinically significant rectocele is at least as efficacious as a transanal repair in terms of relieving symptoms of obstructive defecation. Laparoscopic repair may be the treatment of choice in those women who are sexually active, at risk of faecal incontinence and in those patients with a history of previous perineal surgery.

## Free Communications Abstracts

Friday 23rd Free Communications (A) 1440 – 1450

### Laparoscopic Burch Colposuspension for Recurrent Urinary Stress Incontinence

Michael Wynn-Williams, R. O'Sullivan, Y. Fong, A. Lam  
Centre for Advanced Reproductive Endosurgery, North Shore Private Hospital, Sydney University.

#### Introduction:

A recurrence rate of 5-10% is seen in women having surgical intervention for stress urinary incontinence. Re-operation for these women is difficult due to scarring of the anterior vaginal wall and the retropubic space. The success of open Burch Colposuspension for these women has been investigated with reported success rates of 70-90%. To date only one series has investigated the laparoscopic route of re-operation.

#### Methods:

Patients attending the Centre for Advanced Reproductive Endosurgery between 1995 and 2002 and having failed previous continence surgery were identified. The surgery that they previously had performed was noted. Details of subsequent Laparoscopic Burch procedures were noted along with short term follow-up.

#### Results:

A total of 25 women having had previous continence surgery were identified. They had a mean age of 56.3 (SD 9,1) years and 19 had one, and 6 had two or more previous failed procedures. 85% had pre-operative urodynamics with GSI diagnosed in 16 cases and a mixed diagnosis in 6 cases. Additional surgery was performed in 14 patients (McCall, Vaginal Hysterectomy, Paravaginal Repair, Anterior Repair, Posterior Repair, Perineorrhaphy, Pelvic Floor Repairs) Adhesiolysis was performed in 10 cases. An intraoperative complication was noted in 1 patient, blood loss greater than 500mls not requiring transfusion and the procedure was completed laparoscopically. Ethibond was used in 19 cases, panacryl in 3, and prolene in 2.

Post-operative complications at a median of 8 months were noted in 4 patients. Two had recurrent incontinence, one had de novo irritative symptoms and 1 had cystocele occur.

#### Conclusion:

In keeping with published success rate for primary Laparoscopic Burch Colposuspension, there is a similar subjective success rate for secondary procedures. Long term follow up is on going and will be presented at a later date.

Friday 23rd Free Communications (A) 1450 – 1500

### A Consecutive Series of 670 Laparoscopic Pelvic Reconstructive Surgeries: Safety and Complication Rates

R. O'Sullivan, Michael Wynn-Williams, Y. Fong, A. Lam  
Centre for Advanced Reproductive Endosurgery, North Shore Private Hospital, Sydney University and University of New South Wales.

#### Introduction:

Laparoscopic approaches to the correction of pelvic floor deficiencies are increasing in popularity. The advantages of this approach to pelvic floor dysfunction are anatomical dissection, identification of structures, magnification and visualisation by pneumo-tamponade and pneumo-dissection. As with any new surgical approach, complication rates are often the measure by which initial success is decided.

#### Methods:

The operative and case notes of a series of women having pelvic reconstructive procedures were reviewed. The intra-operative and short/ long term post-operative complications associated with their surgery were noted.

#### Results:

A total of 670 women had pelvic reconstructive surgery performed. The mean age of the group was 55.1years (SD 11.7). A total of 9 women had intra-operative complications. This included 3 bladder injuries, 1 ureteric obstruction and 1 bowel injury with 2 women having having blood loss greater than 500mls with one conversion to laparotomy. In the immediate post-op period 22 developed voiding dysfunction, 13 had severe constipation, 15 were treated for urinary tract infections, 5 had other sepsis (pelvic haematomas, 1 returning to OT), 4 umbilical cellulitis, 1 wound haematoma, and 3 vault suture abscesses. Longer-term complications are listed in the table.

Complication	Number
Severe Constipation	9
De novo or recurrent prolapse	33
De novo or recurrent urinary incontinence	28
Anterior wall inclusion cysts	5
Recurrent UTI's	1
Persistent Pain	3
Vesico-vaginal fistula	1
Suture in rectum or vagina	9

A total of 66(9.8%) women had further surgery, 33 (4.9%) for recurrent prolapse . (23 anterior or posterior wall repairs, 10 lap vault repairs or SSF, 8 suture removals, 25 misc).

**Conclusion:**

Laparoscopic pelvic reconstructive surgery is associated with few intra-operative complications, however post-operative problems are seen in 29% of women with a wide range in severity.

Friday 23rd Free Communications (A) 1500 – 1510

## Johnson & Johnson AGES Travelling Scholarship

Dr Jason Abbott

**Objective:**

To continue developing the team model practice for treating women with chronic pelvic pain and endometriosis

**Destination:** Italy

Intended contacts sites of visit:

- Assistant Professor Paolo Vercellini, University of Milan Italy
- Professor Errico Zupi, University of Rome Italy

**Proposed Activities:**

To observe the running of a large University centre, specialising in endometriosis and pelvic pain. Included would be attendance at operating theatre lists, endometriosis clinics and particularly research activities underway within these departments. The focus of the visit will be on the team model of care for women with chronic pelvic pain, and the involvement of specialists from medical and surgical subspecialties and nursing care, as well as paramedical fields such as physiotherapy and occupational therapy.

**Dates of Travel:**

8-23 February 2003

Friday 23rd Free Communications (A) 1510 – 1520

## A Pilot Study of Botulinum Toxin Type A (Botox) in the Treatment of Chronic Pelvic Pain Associated with Spasm of the Levator Ani Muscle

Jarvis S.K., Abbott J.A., Lenart M, Steensma A, Vancaillie T.G

**Objective:**

To investigate whether Botulinum Toxin Type A (Botox) injected into the levator ani muscles of women with objective pelvic floor muscle (PFM) spasm decreases pain symptoms and improves quality of life. To determine the effect of dilution of 40U Botox at three different strengths on outcome.

**Method/ Design:**

Twelve women, aged 18 – 55 years, with objective PFM hypertonicity and a minimum two-year history of chronic pelvic pain were recruited. All women completed a visual analogue scale pain assessment of dyspareunia, dysmenorrhea, dyschesia and pelvic pain; questionnaires relating to bladder and bowel symptoms and quality of life; and had a gynaecological examination; uroflowmetry; digital PFM assessment and objective manometry pretreatment, and then at four time points over three months. Forty units of Botox at three different dilutions were given bilaterally into the puborectalis & pubococcygeus under conscious sedation.

**Results:**

All women have completed the 12-week protocol, with one withdrawal at week 12. VAS scores were significantly improved for dyspareunia (80 vs. 40;  $p=0.01$ ) and dysmenorrhea (67 vs 28  $p=0.03$ ), with non-significant reductions in non-menstrual pelvic pain (64 vs. 37) and Dyschesia (47 vs. 29). PFM manometry showed a 50% reduction in resting pressure at week 4 and a 33% reduction was maintained at week 12 ( $p<0.0001$ ). Quality of life scores (EQ-5D and SF-12) were improved from baseline at week 12, but did not reach statistical significance. Sexual activity scores were markedly improved, with a significant reduction in discomfort (4.8 vs. 2.2  $p=0.02$ ) and improvement in habit (0.2 vs. 1.9  $p=0.03$ ). These results were not influenced by dilution strength.

**Conclusion:**

There is evidence from this pilot study suggesting that women with PFM hypertonicity & pelvic pain may respond to Botox injections into the PFM. Further research into this novel treatment of chronic pelvic pain is strongly recommended.

## Free Communications Abstracts

Friday 23rd Free Communications (A) 1520 – 1530

Johnson & Johnson AGES Research Scholarship

### Evaluation of the Effectiveness of Education in Gynaecological Laparoscopy Using the CARE Model

Michael Wynn-Williams, Anusch Yasdani, Ray O'Sullivan, Robert Ford, Alan Lam

Centre for Advanced Reproductive Endosurgery, North Shore Private Hospital, University of Sydney, Sydney, Australia

#### Introduction:

With the progressive advancement in minimally invasive gynaecological surgery, more surgeons are turning to structured training courses to learn skills otherwise not taught in their training. The effectiveness of training programs need to be monitored to optimize the benefit to individual surgeons and ultimately their patients.

#### Aim:

To evaluate the effectiveness of the CARE Education program in the development of laparoscopic skills in specialist and trainee gynaecologists.

#### Method:

Candidates attending the five CARE Level 1 Advanced Integrated Training Programs in Minimal Access Pelvic Surgery from May 2002 – May 2003 were included in the study. Pre course surveys were completed, obtaining demographic data, current practice and laparoscopic skills. Two written exams and 26 (16 dry, 10 animal) skills tests were administered to 40 specialists and trainees. Laparoscopic dry skills were simulated with the use of an endotrainer and laparoscopic tower. Eight tasks were assessed initially including placing of an endoloop, tying Weston and Roeder knots, loading a needle laparoscopically, tying intracorporeal ties and closing a defect intracorporeally. Each task was assessed with previously validated tests noting time, time and motion, flow of procedure, and use of assistant. A total of 15 points could be scored for each task. Dry skills test were repeated (day 3) after two teaching sessions. The Animal lab assessed five skills, twice over two labs (day 2 and 5). Skills included partial salpingectomy, ligation of IP, and uterine vessels with a single extracorporeal suture and closure of the vault with intracorporeal sutures. Assessment was as for the dry labs. The written exam was repeated at the end of the five day course.

#### Results:

Results will be presented following the final course.

Friday 23rd Free Communications (B) 1330 – 1340

### Complications of Laparoscopy: Confirmation that the Veress Needle is Safe.

Andrew S. Murray<sup>1</sup>, David Lloyd<sup>2</sup>, David L. Healy<sup>3</sup>

<sup>1</sup> Reproductive Biology Unit Fellow, Department of Obstetrics and Gynecology, Monash Medical Centre, Clayton, Victoria, Australia

<sup>2</sup> Monash Surgical Private Hospital, Clayton, Victoria

<sup>3</sup> Professor, Department of Obstetrics and Gynecology, Monash Medical Centre, Clayton, Victoria, Australia

#### Objectives:

To update an ongoing audit of major complications arising at laparoscopy in a dedicated gynaecological day case surgery facility that exclusively uses the Veress needle.

#### Design:

All major complications from laparoscopies performed March 1 1999 to October 31, 2002 were documented. This was a total of 4238 procedures, bringing the on going total to 15686 procedures since the series began on June 1, 1991. No distinction was made between operative or diagnostic laparoscopy. A major complication was defined as one that required laparotomy to manage.

#### Results:

There were no complications in the current series. This brings the total combined complication rate for all laparoscopies performed since June 1 1991 to 0.52/1000. There is yet to be a vascular injury related to the Veress needle. This is again the largest reported series of consecutive laparoscopies from a single dedicated gynaecological day case facility.

#### Conclusion:

The Veress needle is a safe method of creating a pneumoperitoneum.

#### References:

Jansen FW, Kapiteyn K, Trimbos-Kemper T, Hermans J, Trimbos JB. Complications of laparoscopy: a prospective multicentre observational study. *Br J Obstet Gynaecol* 1997; 104: 595-600.

Tsaltas J., Healy D.L., and Lloyd D. Review of major complications of laparoscopy in a free-standing gynaecological day case hospital. *Gynecological Endoscopy* 1996; 5:265-270.

Tsaltas J., Healy D.L., and Llyod D. Complications of laparoscopy: a tautological audit. *Gynecological Endoscopy* 2001; 10:17-19.

Molloy D, Kaloo P, Cooper M, Nguyen T. Laparoscopic entry: a literature review and analysis of techniques and complications of primary port entry. *Aust N Z J Obstet Gynaecol* 2002; 42: 3: 246-254

Lehmann-Willenbrock E, Riedel HH, Mecke H, Semm K. Pelviscopy/laparoscopy and its complications in Germany, 1949-88. *Journal of Reproductive Medicine* 1992; 37: 671-7.

Peterson HB, Hulka JF, Phillips JM. American Association of Gynecologic Laparoscopists' 1988 membership survey on operative laparoscopy. *Journal of Reproductive Medicine* 1990; 35: 587-9.

A. Murray,  
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#### Method:

All specialists and trainees who attended the CARE Level 1 Advanced Integrated Training Program in Minimal Access Pelvic Surgery from February 2001 to December 2002 completed a comprehensive pre course survey form assessing current practice and laparoscopic skills. A follow up survey form was recently mailed to all candidates who attended over this period. A total of 68 candidates were questioned on their current practice demographics, types of Laparoscopic surgery performed, change in skills since attending the course, entry techniques used, complications encountered, and their overall improvement in performing laparoscopic surgery. Changes in practice were assessed,

#### Results:

The results will be presented.

Friday 23rd Free Communications (B) 1340 – 1350

## Change in Gynaecological Practice after Attending a Laparoscopic Training Course

Michael Wynn-Williams, Anusch Yasdani, Ray O'Sullivan, Alan Lam  
Centre for Advanced Reproductive Endosurgery, North Shore Private Hospital, University of Sydney, Sydney, Australia

#### Introduction:

With the new emphasis of practice improvement and accreditation in gynaecological practice it is often difficult for specialist gynaecologists to advance their skills in minimal access surgery. Patients demand the procedures but the surgeon may have not had any formal training in MIS techniques. One method of self improvement is to attend a training course over several days. There is very little research to say if this can actually change or improve practice.

#### Aim:

To evaluate the change in practice in specialists and trainees who attend a laparoscopic training course.

Friday 23rd Free Communications (B) 1350 – 1400

## Training Advanced Techniques for Gynaecologists

Dr R. Perkins  
Dr A. J. McCartney

The purpose of this talk is to draw attention to the needs of already established gynaecologists who wish to advance their skills.

In the setting of a busy private practice with the prospect of decades of professional life it can be easy particularly for Fellows who graduated more than 20 years ago to miss out on opportunities to learn advanced laparoscopic techniques, something which is becoming more acceptable for current trainees.

I shall present the results of the first twenty cases learning laparoscopic hysterectomies using the vaginal tube and discuss how one sets about gaining the necessary advanced laparoscopic experience.

## Free Communications Abstracts

Friday 23rd Free Communications (B) 1400 – 1410

### **Leiomyosarcoma: Case Study and Review of Clinical, Radiological, Biochemical and Histochemical Differentiation from Leiomyoma**

Susan Evans

3 months after LAVH for a 10cm fibroid, my 46 year old patient died. It was a leiomyosarcoma of high grade, originating in a known fibroid.

The incidence of malignancy in a fibroid has been estimated at 1 in 1000.

Had the diagnosis been known preoperatively, a different surgical approach would have been chosen.

This presentation reviews the effectiveness of available tests at differentiating between leiomyoma and leiomyosarcoma, both pre and post operatively. Such tests include clinical assessment, MRI, lactate dehydrogenase estimation, histochemical markers, biopsy, ultrasound or a combination of the above.

#### **Methods:**

A series of commonly used laparoscopic surgical knots (Square (Hand tied, Intracorporeal and pushed-down) ,Modified Modified Roeder, and Weston ) were studied. These knots were tied on Vicryl, Ethibond, PDS and Prolene sutures all 0 metric. The knots were tied in a random series using hand tying directly onto a specially designed rig. The series was again tied with the rig placed in a laparoscopic trainer. Tensions were measured using an Instron 4200, with peak load and tension of slippage recorded.

#### **Results:**

Five sutures of each knot and suture type were formed with a total of 80 hand tied and 80 laparoscopically tied knots being tested. There was no significant difference in slippage and breakage rates between those tied by hand and those tied laparoscopically for Vicryl, Ethibond and Prolene. However PDS appears to have a trend toward slippage in all knots tested with a significant difference ( $p=0.04$  Wilcoxon) found for Roeder, Weston and knot-pushed knots.

#### **Conclusions:**

It appears that there is no major difference in knot-tensions for commonly utilised sutures whether tied externally on a rig or with laparoscopic simulation. This however may not be the case for PDS, which appears to produce knots of less tension of slippage when tied laparoscopically.

Friday 23rd Free Communications (B) 1410 – 1420

### **Laparoscopic Knot-tensions; Influence of Hand-tying versus Laparoscopic Tying**

Michael Wynn-Williams, Ray O'Sullivan.  
Centre for Advanced Reproductive Endosurgery, Sydney Women's Endosurgery Centre, University of New South Wales

#### **Introduction:**

Although minimally invasive surgery reproduces the same technical phases of traditional surgical techniques, there are still some specific differences due to the limits inherent in the use of ports etc. To date, as far as the authors are aware, no study exists looking at the influence of the method of experimental knot tying on the integrity and tension to slippage/ breakage of commonly used laparoscopic knots.

Friday 23rd Free Communications (B) 1420 – 1430

### **Hands Free Uterine Manipulator-Singh Uterine Cannula and Vaginal Funnel (HUM-SUC)- A New Device to Improve Efficiency and Safety of Total Laparoscopic Hysterectomy**

Karthigasu K A, Brett L, Gan L

This presentation discusses a new device designed by Dr Singh from Perth, Western Australia. The device incorporates hands free uterine manipulation plus the use of a uterine cannula and vaginal funnel (HUM-

SUC) to aid in the performance of total laparoscopic hysterectomies.

The device has numerous advantages. Firstly the hands free uterine manipulation eliminates the need for a second assistant and is compact so as to eliminate the need for any further intraoperative adjustments thus improving operative efficiency.

The uterine cannula and vaginal funnel have numerous advantages, they allow for easy uterine manipulation during the hysterectomy, the funnel promotes ease of demarcation of the bladder from the uterus and facilitates in the dissection, the funnel results in the ureter position being in a constant relationship from the vaginal angles, reducing the risk of injury and finally allows easier entry to the vaginal vault and removal of the uterus. This presentation discusses the advantages of the system and shows it in action.

Friday 23rd Free Communications (B) 1430 – 1440

## " Turn on the Lights "

Dr Jiwan Steven Singh  
Perth Gynae Innovations Group (PGIG)

New types of pelvic probes have been designed to help the Laparoscopic Gynaecologist perform pelvic floor repairs, endometriosis dissection of the culdesac, rectum and bladder

The various organs that we encounter in the pelvis can be illuminated, thereby enhancing the sense that we most rely upon laparoscopic surgery – our sense of sight.

Slides and video images will show some of the probes in action.

I hope you will have as much satisfaction in using these probes, as I have had in developing them as an aid for Laparoscopic Surgery.

Friday 23rd Free Communications (B) 1440 – 1450

## Utilization of Quality of Life Questionnaire (SF36) in Women Undergoing Laparoscopic Resection for Moderate – Severe Endometriosis

Fali Langdana, John Tait, Melanie Gajanayaka, Michel Sangalli, Justine Plunkett, University dept. of Obstetrics and Gynaecology and Wellington Women's Hospital, Wellington, New Zealand

### Introduction:

Laparoscopic resection is a recognized treatment option for women complaining of abdominal pain with endometriosis <sup>1</sup>. The Short Form 36 (SF36) is a validated quality of life questionnaire that addresses various aspects of a woman's health apart from pain. It can be objectively scored and enables the woman to compare her current health with that prior to treatment.

### Aim:

Implementation of the SF36 to evaluate treatment efficacy in women with chronic pelvic pain and treated by laparoscopic resection for moderate – severe endometriosis.

### Material & methods:

Women who complained of abdominal pain and underwent laparoscopic resection for moderate-severe endometriosis from 1st January 2002 – 30th June 2002. The SF36 questionnaire was sent to them by post about 6months after surgery.

### Observations:

Sixteen women were identified in this period. Nine (56%) responses were obtained. Compared to six months before surgery, current health status was felt to be much better in 5 (55%), somewhat better in 2 (22%) and somewhat worse in 2 (22%). Bodily pain in last 4 weeks was absent in 6 (67%), mild in 1 (11%) and moderate in 2 (22%). Seven (67%) women had no physical or emotional problems in the last 4 weeks and 2 (22%) had moderate problems.

### Discussion:

The response rate of the questionnaire was quite poor. Although the sample size was very small, the majority of the women felt better in terms of bodily pain and absence of physical or emotional problems. As a general measure the SF36 appeared to reflect the effects of the endometriosis and other conditions affecting health at the time of measurement. These findings are similar to the study by Bodner et al <sup>2</sup>.

## Free Communications Abstracts

### Conclusion:

The SF36 can provide a reliable, valid package of measures for assessing health related quality of life in women with endometriosis<sup>2</sup>. Such measures should be used alongside clinical measures of outcome to assess different treatment strategies for endometriosis.

### References:

- 1 Farquhar C, Sutton C. The evidence for the management of endometriosis. *Curr Opin Obstet Gynecol* 1998;10:321-32.
- 2 Bodner CH, Garratt AM, Ratcliffe J, Macdonald LM, Penny GC. Measuring health-related quality of life outcomes in women with endometriosis-results of the Gynaecology Audit Project in Scotland 1997;55(2):109-17.

### Results:

No statistical significance was found in the incidence of irritable syndrome between patients with and without endometriosis. Patients with endometriosis who were previously diagnosed with irritable bowel syndrome demonstrated an improvement in pain scores at follow-up.

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Friday 23rd Free Communications (B) 1450 – 1500

### A Prospective Analysis of Irritable Bowel Syndrome in a Series of Patients Primarily Investigated for Endometriosis

**K Raja**, Royal Prince Alfred Hospital  
**D J Kowalski**, Liverpool Hospital  
**G D Reid**, Liverpool Hospital  
**M J W Cooper**, Royal Prince Alfred Hospital

#### Objectives:

To review the incidence of irritable bowel syndrome in a population of subjects undergoing laparoscopy for the management of clinically suspected or proven endometriosis and provide some recommendations for the management of women presenting with ill-defined bowel and symptoms.

#### Methods:

A multi-centre, prospective study. Subjects were recruited from patients undergoing diagnostic laparoscopy, noted to have had a previous diagnosis of irritable bowel syndrome. Suspected lesions were biopsied for histological confirmation and clinical staging was made according to the revised American society for Reproductive Medicine classification (ASRM 1997).

Friday 23rd Free Communications (B) 1500 – 1510

### Laparoscopic Excision of Post Menopausal Obstructive Ureteric Endometriosis

**Y F Fong**, M Wynn-Williams, G Coombes, A Lam.  
Centre for Advanced Reproductive Endosurgery, North Shore Private Hospital, Sydney University, Sydney, Australia

Endometriosis of the ureter is an uncommon event and occurs mainly in premenopausal women. The occurrence of endometriosis is rare in post-menopausal women and is usually linked to unopposed estrogen usage. Unopposed estrogen usage can lead to increased risk of atypical hyperplasia of the endometrium and subsequent endometrial carcinoma but the effect on extragonadal endometriosis is less clear. We present a post-menopausal lady for whom a laparoscopic excision of ureteral endometriosis causing ureteric obstruction was performed and this revealed complex hyperplasia of the ureteric endometriotic tissue.

A 55 year old lady, para 2, presented with worsening left iliac fossa pain for the last 3 years. She was first seen in 1992 for similar symptoms and eventually had a total abdominal hysterectomy and left salpingoophorectomy in 1995. The right ovary appeared to be atrophic and was preserved. The course of the ureters appeared to be normal. She was subsequently put on estrogen patches. This was followed by a laparoscopic drainage of a right ovarian

cyst in 2001. However, her symptoms persisted and gradually grew worse. Preoperative clinical examination revealed a tender left iliac fossa and a palpable cystic enlargement at the vault that was tender. Ultrasound and CT scans confirm the presence of a right ovarian cyst and a semi solid left pelvic side wall lesion, with dilatation of the left ureter down to the mid pelvic region. The suspicion was that of persistent endometriotic activity that has caused progressive fibrosis and consequent left hydro-ureter.

At laparoscopy, severe bowel adhesions were lysed and a large nodular pelvic mass was found extending from the pelvic brim to the ureteric tunnel and down to the bladder, containing both fibrous and endometriotic tissue. A retroperitoneal dissection to mobilise and excise the mass was performed and the left ureter was seen to return to normal diameter. Retrograde cystogram with ureteric stent insertion was performed and the right ovary removed completely. Histology revealed florid endometriosis with complex endometrial hyperplasia of the left pelvic mass.

questions, and relevant intervening medical and surgical treatment.

The data was coded into a 10-point scale where a lower score represented a better outcome. AFS scoring was determined at the time of operation. Specific correlates were determined between disease sites and symptom resolution.

#### Results:

A significant improvement in the pain experienced by these subjects was noted at 3, 6 and 12 months follow-up. However, for rectal pain, the improvement was transient. At 12 month follow-up an increase in self-reported pain was evident.

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Friday 23rd Free Communications (B) 1510 – 1520

## Symptom Relief in Subjects Following Laparoscopic Excisional Surgery for Endometriosis

D J Kowalski, Liverpool Hospital  
G D Reid, Liverpool Hospital  
M J W Cooper, Royal Prince Alfred Hospital

#### Objectives:

To review the improvement in the symptomatology of subjects undergoing laparoscopic excisional surgery for endometriosis.

#### Methods:

A multi-centre, cohort study. Standardised questionnaires were filled out by subjects prior to undergoing laparoscopic assessment for excision of suspected endometriosis. The patients were selected on the basis of prior diagnosis, treatment or a strongly suggestive medical history.

Follow-up questionnaires were then sent out at 3, 6, 12, month intervals. The questionnaires consisted of 31 questions relating to bleeding patterns, pain, urological and gastrointestinal symptoms, psychosocial

Friday 23rd Free Communications (B) 1520 – 1530

## Laparoscopic Management of Lower Gastrointestinal Endometriosis

Y F Fong, M Wynn-Williams, R O'Sullivan, A Lam

The classical presentation of endometriosis as dysmenorrhea is well known. Additional symptoms such as disturbance of bowel habits, tenesmus, rectal bleeding and deep rectal pain can be debilitating and may signify lower bowel involvement. Such lesions may range from superficial serosal involvement to deep infiltrating lesions that extend to the mucosa or cause rectal strictures. Realisation that such lesions when seen tend to be more deeply infiltrating and extensive and that superficial ablation only may not eradicate symptoms has pushed for surgical excision of such disease. Laparoscopic surgery in addition to its general benefits allows improved access and magnification of the surgical field which may be ideal for surgical dissection. Laparoscopic repair of bowel with sutures or staples is also possible for both intended and unintended injuries. We present a series of short video clips of laparoscopic excision of bowel endometriosis of varying severity together with bowel repair.