## VIDEO PRESENTATIONS

## TOPIC 1: HYSTEROSCOPY

## V-01

Office hysteroscopic sterilization using the Essure micro-insert device: an effective alternative for patients with increased operative risk
M.Martinho Lopes Martinho

Hospital S. João, Oporto, Portugal

Objective: The Essure permanent birth control (pbc) device is a minimally invasive transcervically placed micro-insert that occludes the Fallopian tubes, resulting in permanent female sterilization. This device is the first medical device to obtain the FDA approval, for hysteroscopic sterilization. The author's report their experience using this device in an office setting and present data about the safety, effectiveness and tolerance of the procedure.
Methods: The method was presented to women seeking permanent birth control that met the patient selection criteria recommended. Associated pathologies increasing operative risk were taken in consideration and favoured the choice of this method. After an exhaustive explanation of the procedure, women gave their written informed consent and the procedure was scheduled. Essure pbc micro-inserts were inserted in the proximal portion of the Fallopian tubes under hysteroscopic visualisation with paracervical block or no local anaesthesia, in an office setting. The procedure was performed preferentially in the follicular phase of the cycle and women were advised to use an effective contraception method. The patients were evaluated 1 month after the procedure and an pelvic x-ray/ hysterosalpingogram scheduled at 3 months. We analysed retrospectively all clinical files and evaluated, the safety of the procedure, the tolerance and recovery from the procedure, tubal occlusion and device placement.
Results: From May 2002 to December 2005, 89 women aged 26-47 ( $37,75 \%$ ) were submitted to the procedure; Associated pathology increasing the operative risk was present in 84 ( $94,38 \%$ )patients. Bilateral device placement was achieved in $86(96,63 \%)$ women. In 4 ( $4,49 \%$ ) women a second procedure was required to accomplish bilateral placement. In $1(1,12 \%)$ only unilateral placement was possible. In 2 cases $(2,24 \%)$ expulsion of one device occurred. The procedure was classified to be highly acceptable by 78 ( $87,64 \%$ ) women. Regarding medication, 31 ( $34,83 \%$ ) women received diazepam, 5 mg , orally prior placement and N butil bromide of hioscine i. v . during procedure and 52 ibuprofen, 30 minutes before the procedure; 17 ( $19,1 \%$ ) patients had paracervical block and 35 ( $39,32 \%$ ) needed analgesic medication during or immediately after the procedure but, no patient complaint from post-procedure pain
at the moment of discharge. No major complications occurred. All patients but 3 ( $96,51 \%$ ) had a correct device location and/or bilateral tubal occlusion 3 month after procedure as confirmed by HSG/pelvic x-ray. Two of these 3 patients achieved it at the 6th month post-procedure. At present, 85 women were able to rely on Essure for permanent birth control and no pregnancies occurred. Mean duration of the procedure was 8,6 minutes.
Conclusion: According to our experience this method can be performed safely and with minimal patient's discomfort in an office setting. It was associated with a rapid recovery, high patient satisfaction and low rate of complications. Data presented are similar to those in the literature and suggest that this procedure may be an effective alternative to women seeking sterilization without requirement of incisions and general anaesthesia and especially to women with increased operative risk.

## V-02

## Laparoscopic cervical cerclage for recurrent mid-trimester

 abortionJ T Wright
Ashford \& St Peter's NHS Trust, Chertsey, Surrey, United Kingdom
A simple and safe technique for laparoscopic cervical cerclage for women with a history of recurrent mid trimester abortions will be demonstrated. The technique is suitable to be carried out as a day case procedure and its novel approach is demonstrated using a blunt needle passed just below the uterine arteries without significant vascular trauma.
Six procedures have been carried out in the past two years with no operative morbidity and four of these women have subsequently conceived and carried to term, being delivered just before term by elective caesarean section. There have been no preterm labours.

## V-03

Intraperitoneal Saline Infusion Sonography. A pilot study to investigate a new method of visualizing the Fallopian Tubes and Peritubal Adhesions.
P.S.M. Bakker ${ }^{1}$, H.A.M. Brölmann ${ }^{2}$, A.R. Hoogendoorn ${ }^{2}$, J.W. van der Slikke ${ }^{2}$
${ }^{1}$ Medisch Spectrum Twente, Enschede, Netherlands, ${ }^{2}$ Vrije Universiteit Medisch Centrum, Amsterdam, Netherlands

Objectives: The purpose of this pilot study is to evaluate the feasibility of investigating a new, less invasive diagnostic procedure in detecting adhesions of the internal genitalia.

Design and Methods: We performed a multicenter trial to evaluate IntraPeritoneal Saline Infusion Sonography (IPSIS) in women undergoing a diagnostic laparoscopy. IPSIS is a transvaginal ultrasound after administering 200 ml of saline via cervix and fallopian tubes into the retrovaginal cavity, thus creating a contrast. 9 patients underwent the IPSIS and laparoscopy, both procedures were recorded on video or DVD and watched afterwards to evaluate the feasibility of a study to investigate the accurateness of IPSIS compared to diagnostic laparoscopy.
Results: In 5 women undergoing IPSIS and laparoscopy, we could visualize both fallopian tubes. When a bilateral "fimbrial dance" was seen, there was no indication for intraperitoneal adhesions.

| fimbriae seen | laparoscopy adhesions |  | IPSIS |  |
| :--- | :--- | :--- | :--- | :--- |
| patient | right | left | right | left |
| 2 | + | + | - | - |
| 10 | - | - | - | + |
| 11 | - | - | $\pm$ | $\pm$ |
| 12 | $\pm$ | - | $\pm$ | $\pm$ |
| 13 | - | - | $\pm$ | $\pm$ |
| 16 | - | - | + | + |
| 22 | - | - | $\pm$ | $\pm$ |
| 23 | - | - | + | - |
| 24 | - |  | + | - |

Conclusions: IPSIS is a method of transvaginal ultrasound which makes the Fallopian tubes and peritubal adhesions visible in most of the investigated women, suggesting it possibly is a worthful, less invasive diagnostic procedure in detecting adhesions. Further investigations will evaluate the sensitivity of IPSIS compared to diagnostic laparoscopy.

## V-04

## Mini-hysteroscopy versus traditional hysteroscopy in infertility investigation

R Clarizia, S Conforti, C Cadente Colucci, A Mollo, G Castaldo, C Del Tufo, C Romano, E Fiore, G De Placido
University of Naples "Federico II", Obstetric and Gynaecological Sciences Urologic and Reproductive Medicine, Naples, Italy., Naples, Italy

Introduction: Hysteroscopy is the gold standard diagnostic tool for direct visualization of the uterine cavity which, in a diagnostic route for female infertility, is often required. Aim of this study was to compare traditional hysteroscopy to the mini-hysteroscopy in terms of compliance, side effects and diagnostic efficacy.
Methods: We prospectively considered 950 women candidates to an IVF programme. All women underwent an outpatient hysteroscopy: in 602 cases (Group A) a mini-hysteroscope, which is 1.8 mm thick with an outer sheat of 3.5 mm , was employed. In 348 women (Group B) a 5 mm hysetroscope was adopted. No analgesic drug or anaesthesia were ever administered. Visual Analogue Scale (VAS) was administered after the procedure to all patients, asking to evaluate the pain on a scale from 0 to 10. RESULTS: Failure rate
was $18 / 602$ (3\%) in Group A and $22 / 348$ (6.3\%) in group B. A regular cavity was found in 388 out of 602 patients ( $64.4 \%$ ) in group A and in 210 out of $348(60.3 \%)$ in group B; endometrial polyps were found in $146 / 602$ patients $(24.2 \%)$ in group A and in $82 / 348$ $(23.6 \%)$ in group B; fibroids were found in 26 out of 602 patients in group A ( $4.3 \%$ ) and in 19 out of 348 patients in group B ( $5.6 \%$ ); an uterine septum was found in $24 / 602$ cases ( $4 \%$ ) in group A and in $15 / 348$ cases ( $4.9 \%$ ) in group B. In an office setting, 50 polypectomies were performed in group A patients and 15 in group B, 10 myomecomies in group A and 8 in group B, 14 metroplasties in group A and 6 in group B. No significative differences in terms of side effects were found between groups. Visual analogue scale pain mean score resulted to be significantly lower ( $\mathrm{p}<0.001$ ) in patients of group A (median 3, range $0-9$ ) than in those of group B (median 5, range 1-9).
Discussion: Office mini-hysteroscopy is a very effective diagnostic tool in an infertility work-up and is more accepted than traditional hysteroscopy. Most of the office surgical procedures needed in an infertility work-up seem to be feasible with a 3.5 mm hysteroscope, so that the technique could represent a routinary step in the infertile women investigation and therapy.

## V-05

Hysteroscopic myomectomy by the combined use of cold non-electrical and electrical loops: beyond grading?<br>FPG Leone, C Lanzani, C Marciante, E Ferrazzi<br>Dept Obst/Gyn, DSC L. Sacco, University of Milan, Milan, Italy

Objectives: To assess the efficacy of the combined use of cold non-electrical, and electrical loops for hysteroscopic myomectomy, and to verify the role of myoma grading by using this technique.
Methods: Ninety-seven symptomatic pre-menopausal patients with transvaginal sonographic diagnosis and sonohysterographic grading of submucous myomas were included in this prospective study. Hysteroscopic myomectomy was performed by the combined electrical slicing and non-electrical traction and leverage. Myomas were classified as G0, G1, G2.
Results: Median myoma diameter was 2.1 cm (interquartile range 1.6-2.8). Operating time was significantly shorter in G0 than in G1 and G2 myomas. Complications and incomplete resections occurred only in G1 and in G2 myomas, with no inter-groups differences. All main outcome but complications (4\%) were significantly worse in the 19 cases with G1-G2 myomas larger than 2.8 cm (mean; range): operating time ( $50 \mathrm{~min} ; 35-90 \mathrm{~min}$ ), fluid deficit ( $500 \mathrm{ml} ; 300-700 \mathrm{ml}$ ), incomplete resections ( $47 \%$ ). A multivariate analysis (G1 vs. G2) proved that myoma mean diameter is the only significant, independent determinant of outcome.
Conclusions: Myomectomy with non-electrical and electrical loops is an effective therapy for submucous myomas. By this technique, G1-G2 myoma grading loses its importance in favour of the myoma mean diameter.

## V-06

Rare cases of abnormal findings during transcervical embryoscopy<br>M Paschopoulos ${ }^{1}$, LG Lavasidis ${ }^{1}$, EN Meridis ${ }^{2}$, TVrekoussis ${ }^{1}$, F Grozou ${ }^{1}$, A Vlachopoulou ${ }^{1}$, N Dalkalitsis ${ }^{1}$, E Paraskevaidis ${ }^{1}$<br>${ }^{1}$ Dept of OB/GYN, Medical School, University of Ioannina, Ioannina, Greece, ${ }^{2}$ Hammersmith Hospital, Imperial College, London, United Kingdom

Transcervical embryoscopy is a well-established procedure during which the immediate view of the fetal characteristics is possible. Both in normal and abnormal cases of embryoscopy, the endoscopist is able to observe the structural changes of the fetus. Three cases of abnormal fetuses are hereby presented: a case in which the phenotype of the fetus is described as "oloprosencephaly", a case in which the phenotype of the fetus is described as "gastroschisis", and, finally, a case in which the phenotype is described as " $\sigma \alpha \alpha \alpha$ ". The correspondence of each phenotype to the karyotype, rate of appearance, description of the abnormal anatomical characteristics, and prognosis are discussed. It is important to study an abnormal phenotypical characteristic during embryoscopy, because it may contribute to any further information, in order to fully understand fetal anomalies.

## TOPIC 2: HYSTERECTOMY

## V-07

## 314 laparoscopic subtotal hysterectomies. Methods and results

 J GronlundSygehus Vendsyssel, Hjorring, Denmark

The video presentation shows the so-called tripolar cutting forceps used in all parts of the procedure except in morcellation. We have recorded among other things indications, pervious caesarean sections, operation time, uterine weight, perioperative complications, postoperative period, the results of pathological examination of the uterus, absence due to illness. Two major complications (damage to the ureter). Conversion to open operation in 14 cases. The length of hospital stay convalescence are short. Overall the results are promising and economical.

## V-08

## Combined laparoscopic and vaginal hysterectomy of large uterus with uterine artery coagulation through retrograde umbilical artery tracking <br> H. Roman, B. Resch, S. Blanc, L. Sentilhes, F. Sergent, <br> L. Marpeau <br> Rouen University Hospital, Rouen, France

Laparoscopic hysterectomy is a reproducible and valid surgical approach; however in a very large uterus (more than 800 g ) it may be necessary to adapt several stages in the classical
procedure. The first stage, performed on the onset of the surgical procedure, is the complete uterus devascularization, via the coagulation of both uterine arteries at their origins through retrograde umbilical artery tracking and by coagulation and section of the upper uterine vascular (either ovarian or adnexal) pedicles. In order to reach this stage, two technical particularities must be underlined: the upper site of all four trocars and the strong lateral deviation of the uterus carried out by the third operator placed between patient legs. Once the uterus is devascularized, the next stage will permit a reduction in the volume of the uterus either by uterine bisection, multiple myomectomies or morcellation. This stage is generally easy to perform and does not require coagulation because only venous blood retained in the uterus is lost. The following stages are similar to these described in the classical procedure: bladder dissection, section of uterosacral ligaments and coagulation of uterine pedicles near the uterine isthmus. Vagina may be opened laparoscopically or vaginally and the patient's position is changed in order to allow uterine fragment retrieval from the vagina. This step may take up to 30-40 minutes, depending on uterine size and the number of fragments to be removed. Vagina may be sutured laparoscopically or vaginally. This technique is feasible and reproducible by experienced surgeons and avoids the use of the laparotomy in much enlarged uterus. The time for accomplishing varies from 90 to 180 minutes. In our opinion, the key of the successful procedure is uterine devascularization as previously described that could be performed independently of the uterine size.

## V-09

New method of laparoscopic subtotal hysterectomy
Mamuka Mikadze
Privat Hospital "Beau Monde" Ltd., Kutaisi, Georgia
We offer a new method of laparoscopic subtotal hysterectomy and tool for its realization (patent application of Russian Federation ${ }^{1} 36$ $\backslash 1 \backslash 7$ from 23.11.2004).
The essence of a new method is, that after cutting off of appendages and coagulating vessels of uterus, the imposing metal coagulator loop of the tool on the cervix of uterus is made and it cutting off in a mode of the mixed cutting.
The outcomes and charges 28 operations with use of the given method were analyzed current.
Locally surface of stump is equal with the minimal damage of tissue. At half peritonisation of uterus stump was not made. Drainage of abdominal cavity was not made. At dynamic laparoscopies of development adhesion process is not revealed.
The application of the given method has allowed to reduce time of hospitalization to 1 day, to lower operational expenses on $12^{+}+$ $4 \%$, to reduce time of operation on $26+6$ minutes, intra- and post - operational complications were not detected.
Simplicity, safety and economic feasibility allow to recommend a method for wide application.

## V-10

## Day care laparoscopic hysterectomy

R Modi
Akola Endoscopy Centre, Akola, Maharashtra, India
'The mind once stretched by a new idea, never regains its original dimensions.'
Day care laparoscopic hysterectomy, to admit the patient in the morning, operate for a laparoscopic hysterectomy and to discharge the patient in the evening, is now possible. The developments in the laparoscopic surgical skill and the anaesthesia medications have made it possible.
The key to day care is achieving perfect haemostasis and a clean field with minimal charring at the end of the procedure. Presenting the concepts which helped to develop day care hysterectomy, right from counselling the patient, to early mobilisation and prevention of nausea / vomiting postoperatively. Also the complications and challenges faced in the 350 day care hysterectomies done in the last 18 months.
As with any surgical procedure, laparoscopic hysterectomy has also got its share of complications. Bowel injury during port entry and urological injury due to ischemia caused by excessive coagulation are the most unwanted complications associated with laparoscopic mode of surgery.
Complications change as one progresses from the LAVH stage to Total lap hysterectomy. From the initial complications associated with the laparoscopic technique, the shift is towards complications inherently associated with the procedure of hysterectomy itself, as more \& more challenging cases fall into the laparoscopic indications.

## V-11

The Plymouth colpotomy tube for total laparoscopic hysterectomy
J Frappell, P Scott, L Dupuch, M Zachariah
Derriford Hospital, Plymouth, United Kingdom
Total laparoscopic hysterectomy is an operation which is gradually growing in popularity as an alternative to total abdominal hysterectomy in cases where vaginal hysterectomy is not an option and where the uterus is not significantly enlarged beyond the size of a 12 week pregnancy. The advantages in terms of patient preference because of improved cosmetic result, reduced post-operative discomfort and overall post-operative morbidity, time taken to return to work, and bed occupancy are now universally recognised. Recent reports have highlighted to benefits of TLH in obese women requiring hysterectomy for endometrial cancer.
TLH requires high levels of laparoscopic operating skills, and published series have highlighted the increased risk of damage to the ureters and bladder. The use of a vaginal tube to delineate more clearly the upper vagina has been shown to make the colpotomy part of the operation easier to perform. It also has the added benefit of pushing the vaginal fornices in a cephalad direction away from the bladder and the ureters which are therefore less likely to be damaged during this stage of the operation. Currently, the colpotomy tubes commercially available for this indication are the McCartney tube ${ }^{3}$ and the Koh colpotomiser system ${ }^{4}$. Our experience with the

McCartney tube in our first TLH procedures led us to believe that it was unnecessarily complicated, rather cumbersome and overall not cost effective.
We therefore set out to design a simpler device which would still achieve the essential requirements of the tube i.e., the tube should clearly delineate the vaginal fornices, provide a gas tight seal once the vaginal fornix is opened, and would allow the passage of 5 and 10 mm laparoscopic instruments from below together with a curved needle for suturing if required.
The original prototypes were made in the medical engineering department of Derriford Hospital, Plymouth. Our experience with this prototype was very positive and we now use it in all our cases. A prototype incorporating the same design has now been produced by LINA with a view to commercial production in the future. This will be a single use item with a cost estimated at $£ 25.00$.
This video presentation demonstrates our experience with the original prototype and the LINA prototype. We feel that this tube is a safe and cost effective alternative to more expensive devices which are currently on the market, and will therefore help to make the benefits of TLH available to a wider number of patients.

## V-12

## Skeletonisation of the Uterines in Lap Hysterectomy

R Modi
Akola Endoscopy Centre, Akola, Maharashtra, India
In hysterectomy, the most important step is to be able to tackle the uterine vessels. Once the uterine artery is effectively blocked, the rest of the surgery proceeds effortlessly. There are a number of modalities like Vessel Sealing Electro Cautery, Ultrasonic Coagulating device and others, which aim to be effective for this purpose. This study was focused on developing the technique of skeletonisation of the uterine vessels. After complete skeletonisation, the standard bipolar coagulation was used without use of vessel sealing effect or the 'smart cautery' effect.
Skeletonisation of the uterines is the key to effective desiccation of the vessels irrespective of the machine. "The Magic is in the Magician, Not in the Wand".
With effective desiccation of the uterines, bleeding is nil or minimal. And due to this the residual charring of the tissues is also very minimal. The end result meant more white than black tissue i.e. with minimal charring. Subsequent tissue reaction and pain are also reduced significantly. The patient recovery is faster making hysterectomy a painless and patient friendly surgery.
This evaluation of 350 cases of Total Laparoscopic Hysterectomy was done in an attempt to make it a more patient friendly surgery.

## V-13

Total Laparoscopic Hysterectomy Utilizing The "Lubbe-Levator" FJ LUBBE<br>Dr F J Lubbe, Johannesburg, South Africa

A surgical technique in performing total laparoscopic hysterectomy using the Lubbe-Levator, is demonstrated. The Lubbe-Levator has been designed with cost saving and safety as the prime objective.

The Lubbe-Levator is being described as a total laparoscopic hysterectomy system consisting of eight cervical cups of various diameter, an endocervical spiral blade for cervical traction engagement and ten intra-uterine surgical steel pins of various lengths to maximise manipulation of the entire uterine axis in all planes. A vaginal operating cannula (V.O.C.) is an optional addition.
This is the only manipulator with cervical engagement by mechanical traction of the cervix into the cup, resulting in maximal vaginal fornix delineation for precise circumferential colpotomy. Another unique feature involves uterine manipulation in all planes, once cervical engagement and maximum vault delineation has been established in a fixed position.
This fully reusable instrument was self designed in an attempt to overcome the technical complexities of TLH and indeed is a breakthrough in simplifying the technique of TLH. Transection of the uterine vessels and circumferential colpotomy can be performed with minimal risk of ureteric injury.
The vaginal operating cannula can be compared to the Mc Cartney's tube and may be added to the system to maintain pneumoperitoneum while performing transvaginal morcellation of a large myomatous uterus.
Technique: Haemostasis and transection of vascular and ligamentous pedicles are achieved by bipolar electrosurgical coaptation. The entire procedure is performed laparoscopically including closure of vaginal vault.
This instrument has been used routinely by the author since 1997. Shortest surgery time is 47 minutes and mean surgery time is approximately 84 minutes. The total event cost is comparable to LSH and significantly less than any of the other hysterectomy techniques in a comparative cost analysis performed in South Africa and documented in the "Big 5" Study.

## TOPIC 3: PELVIC FLOOR

## V-14

## Laparoscoric sacrovaginopexy vs. Prolift in treatment of genital prolapses

A.A. Popov, T.N. Manannikova, G.G. Shaginyan,
M.R. Ramazanov, A.A. Fedorov

Dp. Endoscopy Moscow Reserch Institute O/G, Moscow, Russia
Introduction: Laparoscopic sacrovaginopexy (Ls SVP) is a popular procedure in our clinic.
Methods: From 1996 year we have done 214 Ls SVP in patients with genital prolapses (GP) III - IV degree. We preferred to do hysterectomy, colporraphy in the most cases. This type of treatment showed good result in $96 \%$ of patients, no erosions and foreing body reaction. The advantages of Ls SVP are: low risk of infection, because there is not big vaginal incision; no dispareunia, because we used physiological way of vaginal tube. The disadvantages are: long operation time ( $>2$ hours); high risk of complications in patients with cardio-vascular problems, obesity women and women who had open surgery before.

From 2005 we have done 16 procedures by Prolift system in cases with GP IV. The advantages of Prolift are: universalism of operation, it can be done under regional anesthesia. The disadvantage is high risk of infection, because there are big size of synthetic prosthesis and big incision of the vaginal mucosa.
Discussion: We prefer Ls SVP in patients with long history of activities life (sex incl.). It should be better to use Prolift system in old patients with extra- genital pathology, obesities women and women who had open surgery before.

## V-15

The gold standard technique for laparoscopic lateral suspension for cure of genital prolapse with conservation of the uterus
Jb Duibuisson, S Jacob, Jm Wenger, At Vlastos,
M Ghahremani
Hôpitaux Universitaires de Genève, Genève, Switzerland
Introduction: To report the technique of lateral suspension for cure of genital prolapse in women desiring a conservative treatment with uterine preservation.
Methods: A precise description of the technique of lateral suspension using mesh.
Fifty two patients, from January 2004 to January 2006, who presented with genital prolapse with or without SUI, subsequently underwent our laparoscopic technique.
After vesicovaginal and rectovaginal dissection, the first step involves the posterior compartment and consists of the placement of a patch of mersilene mesh adapted to the size of the rectocele (usually 5 X 5 cm ). The inferior edge is attached to the levator ani and the superior edge to the posterior isthmus. The sacral segment of the uterosacral ligaments is then reattached to the torus uterinum. The next step is to prepare a long strip of polyester mesh of 30 cm long and 3 cm wide which is introduced into the peritoneal cavity and then fixed at its middle part to the pubovaginal fascia and to the anterior isthmus. The third step is the lateral suspension using a subperitoneal tunnelling procedure with placement of the distal parts of the mesh in the abdominal wall above the iliac crests.
Results: No peri-operative complications or postoperative mesh erosion were noted. Two recurrences were observed (3.8\%).
Discussion: Laparoscopic lateral suspension with conservation of the uterus is an efficient procedure with no risk of mesh erosion.

## V-16

## A "Retzius" View of The Various Midurethral Tape Insertion Techniques

F Lubbe
Lubbe, Johannesburg, South Africa
Since the introduction of the tension free vaginal tape (TVT), two more techniques of midurethral sling insertion techniques have been described, namely the transobturator tapes with outside-in and inside-out approaches. Various advantages and disadvantages have been claimed for each of these techniques.

Patients complaining of stress urinary incontinence (SUI) who also presented with clinical evidence of a significant cystocele were the subject matter of this presentation.At the time of laparoscopic paravaginal repair for the anterior compartment prolapse, a midurethral sling procedure was also performed for SUI while being observed from the space of Retzius laparoscopically. Interesting findings were observed which will improve the understanding of these sling procedures as well as the "retzius" anatomy. The gold standard "Burch" procedure is also demonstrated and technically compared.

## V-17

## Inflammatory Pseudotumor of Urachus

F Osório ${ }^{1}$, P Ramoa ${ }^{2}$, F Faustino $^{3}$, A Setúbal ${ }^{3}$
${ }^{1}$ Hospital Santa Maria, Lisboa, Portugal, ${ }^{2}$ Maternidade Julio Dinis, Porto, Portugal, ${ }^{3}$ Endoags, Lisboa, Portugal

Anomalies of urachus are extremely rare and generally are related to a patent tract and cyst formation. Inflammatory pseudotumor of urachus is a rare benign lesion of unknown etiology that might mimics invasive malignant tumors of the urinary tract. It is mainly diagnosed till the adolescence and rarely appears in adulthood. The diagnosis is based on physical examination and imaging studies and the gold standard treatment is surgical resection.
We present a clinical case of a 55 years old woman, multiparous and asymptomatic, with a pré-peritoneal neoformation in the middle umbilical ligament. The patient was submitted to a laparoscopic surgery and tumor was removed intact. The histopathological examination revealed an inflammatory pseudotumor of urachus. The authors show a video of laparoscopic resection of the tumor.

## V-18

## The laparoscopic lateral suspension using a Mesh for Cure of POP is a safe technique <br> Jb Dubuisson, S Jacob, Jm Wenger, M Ghahremani <br> Hôpitaux Universitaires de Genève, Genève, Switzerland

Introduction: To demonstrate that the laparoscopic lateral suspension using mesh is a safe procedure with a low rate of complications. Methods : Prospective analysis of 112 consecutive cases of genital prolapse, with or without SUI, treated laparoscopically by lateral suspension using mesh. The study was carried out to report the complications of the surgery.
One hundred twelve women, mean age : 55.67+/-11.82 (34-81) years, BMI :26.37+/-3.98 (18-37) with stage II, III and IV genital prolapse according to the POPQ classification : Stage II, III and IV cystocele was noted in $91 \%$, stage II, III and IV hysterocele in $62.5 \%$, stage II,III and IV rectocele in $54.5 \%$. All the candidates for laparoscopy were included.
The laparoscopy consisted of a tension-free lateral suspension (above the iliac crest) using a polyester mesh ( $30 \times 3 \mathrm{~cm}$ ) (Mersilene) according to our previously published technique. A Burch was performed when SUI was present (58\%), a STLH was associated in 33 patients among 85 (38.8\%).

Results: The procedure was successfully completed in all 112 patients without conversion to laparotomy. Only 1 operative complication ( $0.9 \%$ ) occurred: 3 mm bladder injury sutured immediately, without any complications. We observed 7 postoperative minimal complications $(6.25 \%)$ related to the technique of suspension: ablation of a nonabsorbable suture in the posterior wall of the vagina without anesthesia $(\mathrm{n}=2)$, pelvic pain with spontaneous relief ( $\mathrm{n}=3$ ), pelvic hematoma resolved spontaneously ( $\mathrm{n}=2$ ). Only 1 post operative complication ( $0.9 \%$ ) needed a reoperation (incisional trocar hernia). No vaginal mesh erosion occured.
Discussion: Lateral suspension is a safe procedure without any major complications.

## V-19

## Mesh plastic of rectocele

A.A. Popov ${ }^{1}$, T.N. Manannikova, G.G. Shaginyan, M.R. Ramazanov, O.G. Kiryushkina, A.A. Fedorov

Dp. Endoscopy Moscow Reg. Research Institute O/G, Russia
Materials and methods: MESH plastic of rectocele is carried out since 2002 year among 42 patients in the age of $47-63$ with recurrence of rectocele. All the patients have hysterectomy by vaginally or abdomen with different methods of vaginopexy, colpoperineolevatoroplastic. Recurrence of rectocele developed during the 12-36 months and was accompanied by sexual discomfort, disturbances of defecation.
Method of MESH plastic of rectocele is combined with plastic of defect of the peritoneal-perineum aponeurosis. We applied prolene MESH in the form of T-shirt. The basis of the prosthesis applied to the defect and its loose ends took out on the skin of the perianal area behind the m . levator ani, with the assistance of IVS-tuneller.
Results: We have the long term results of the technique (6-48 months). There was no sexual discomfort, disturbances of defecation or recurrence of prolapses. Analysis in 42 patients revealed the reliable differences of sexual status before and after surgical treatment. Thus 32 patients ( $75 \%$ ) noted the satisfaction of sexual life. Frequency of sexual intercourse is increased in 28 patients ( $66 \%$ ). No erosions and foreign body reaction when we used MESH soft.
Summary: In spite of a small number of the patients and a short period of care it is noted the simple technique of this operation without any hemorrhagic or infection complications and good functional results. The indication is recurrence or high risk of reccurrence of rectocele.

## TOPIC 4: ONCOLOGY

## V-20

Total laparoscopic radical hysterectomy - a new approach in minimal invasive surgery without leaving oncologic aspect F. Suwandinata, K. Muenstedt, H.R. Tinneberg

Department of Obstetrics and Gynecology of University Hospital Giessen, Giessen, Hessen, Germany

Introduction: To evaluate the possible advantages of the total laparoscopic radical hysterectomies (TLRH) procedure in comparison to the conventional radical Wertheim hysterectomy (CW) procedure.
Methods: 25 patients were included in a retrospective study. Within 10 months, 8 patients, who underwent TLRH because of early primary cervical cancer, were compared to 17 patients, who underwent CW. Parameters of interest were mean time of surgery, blood loss, tumor stage, number of resected lymph nodes, complications, and hospital stay. Comparisons were statistically tested using the ANOVA one way test.
Results: In the TLRH group 4 patients were diagnosed in stage pT1b1, one in stage pT2a, and three in stage pT2b. Tumor stages in the CW group were comparable. Mean age in the TLRH group was $39.1 \pm 9.4$ years vs. CW $53.9 \pm 13.2$ years ( $p<0.05$ ). No differences were found in body mass index (TLRH: $24.5 \pm 2.4 \mathrm{vs}$. CW $25.1 \pm 3.8$ ). Mean duration of surgery was $320 \pm 106$ minutes for TLRH vs. 293 $\pm 80$ minutes for CW (n.s.). The mean blood loss for TLRH was 232 ml vs. 798 ml for $\mathrm{CW}(\mathrm{p}<0.05$ ). Accordingly, postoperative decrease of haemoglobin serum levels was lower in the TLRH group $2.05 \pm 1.05 \mathrm{~g} / \mathrm{dl}$ vs. $3.43 \pm 1.13 \mathrm{~g} / \mathrm{dl}(\mathrm{p}<0.05)$. The mean number of resected lymph nodes was 16 in the TLRH group vs. 21 in the CW group ( $\mathrm{p}>0.05$ ). No major complications or deaths were recorded. Minor complication was bladder dysfunction. The median length of hospitalisation was 8 days in the TLRH group compared to 11 days (n.s.). Surgical margins were free in 6 out of the 8 patients in the TLRH group. These patients had pT2b stage.
Discussion: TLRH represents an interesting and safe new technique with equivalent complications than laparotomy. Lower blood loss and faster postoperative recovery are clear advantage; however, the technique of TLRH requires great skills in minimal invasive surgery. The result from our TLRH group is comparable with other studies from Querlue. TLRH may be less appropriate for more advanced stages (pT2b). Large scale prospective trials are justified to prove the reported benefits.

## V-21

Anatomic description of the pelvic ureter. Modifications in pathological conditions.
J Gilabert-Estelles, J Gilabert-Aguilar, V Payá, V Diago,

## J.J. Rodenas

Hospital Arnau de Vilanova, Valencia, Spain
Objective: To make an anatomical endoscopic description of the pelvic ureter and describe its relationship with other retroperitoneal structures. To study the anatomical variations in pathological situations such endometriosis, intraligamentary fibromas and genital cancer.
Methods: Review of recorded procedures performed by laparoscopy in our department in the last two years.
Discussion: The ureter enters the pelvis over the bifurcation of the iliac vessel at the level of the infundibulopelvic ligament. It is included in the broad ligament during its pelvic course and the inspection through the peritoneum allows its identification.
The dissection of the ureter may be difficulted in situations such deep endometriosis. A lateral displacement of the ureter may occur in cases of ovarian endometriosis, while in the presence of
rectovaginal endometriosis the caudal portion of the ureter may be displaced medially. Intraligamentary myomas may distort the course of the ureter. A wide open of the retroperitoneum allows the identification of the ureter. Dissection and ligation of the uterine artery at its origin facilitates the enucleation of big myomas at this location. Caudally, the ureter enters the ureteric canal at the level of the uterine vessels by crossing the upper portion of the lateral parametrium. Inside this canal the ureter conserves a connective sheath that permits a blood-free laparoscopic dissection. In case of radical hysterectomy this step may be followed by the dissection of the vesicovaginal ligament in order to identify the entrance of the ureter in the bladder.
Conclusions: Laparoscopic approach is an excellent tool to improve the knowledge of ureteral anatomy and the modifications of its course related to pelvic pathological conditions.

## V-22

Ureteral tunnel management during radical hysterectomy for cervical cancer. A new variant technique
A Zapico, P Fuentes, F Arnanz, A López Yagüe, J Otazua, A Grassa
Príncipe de Asturias Hospital. School of Medecine. Alcalá University, Madrid, Spain

Objectives: To show a new procedrure for ureteral tunnel management during laparoscopic radical hysterectomy for cervical cancer. Design and Method: Since 2002 we have used a modified technique of laparoscopic radical hysterectomy This technique is based upon that described by Querleu-Dargent but it includes a modified step to treat the parametria and the ureteral tunnel. After coagulation and resection of the parametria, and just before ureteral tunnel approach both ureters are isolated by placing vessel-loops. The ends of the vessel-loop are placed into the vagina through an anterior colpotomy previously performed. Once on vaginal route, gentle traction of vessel-loops allows an easy identification and dissection of the ureter.
Conclusion: Laparoscopic vessel-loop isolation of the ureters allows an easier and safer vaginal management of the ureteral tunnel during laparoscopic-vaginal radical hysterectomy.

## V-23

Temporary bilateral ovarian suspension (BOS) to facilitate laparoscopic pelvic side wall dissection: a new technique
L. Chapman, P. Gambadauro, P. Papalampros, D. Polyzos,
N. Papadopoulos, A. Magos

Minimaly Invasive Therapy Unit \& Endoscopy Training Centre, University Department of Obstetrics and Gynaecology, The Royal Free Hospital, London, United Kingdom

Background: We aim to demonstrate through a video presentation a new technique of bilateral temporary ovarian suspension during laparoscopic surgery to facilitate pelvic side wall dissection Pelvic side wall dissection is often required when treating endometriosis laparoscopically. Access to the side walls is usually compromised
by the overlying adnexa. We describe a technique that facilitates pelvic side wall access by temporarily displacing both ovaries simultaneously anterior to the uterus using a single suture.
Technique: After ovariolysis if required, a $2 / 0$ polyglactin suture on a curved needle is passed through each ovary and tied extracorporeally using a Roeder knot. The suture is tightened to approximate the ovaries over the anterior surface of the uterus, which is then anteverted to lift the adnexa out of the pelvis. Pelvic side wall dissection then can be carried out unimpeded. The ovaries are replaced to their normal position at the end of surgery by simply cutting the suture.
Experience: We have successfully used this technique in 15 women undergoing laparoscopic surgery for endometriosis. We had a clear view of the pelvic side walls, and surgery was made considerably more efficient. We did note that ovarian suspension alters the course of the pelvic ureters, and this must be recognized. Apart from occasional slight oozing from the puncture sites, bilateral ovarian suspension was not associated with the need to repair the ovaries, and we had no problems related to the suspension procedure.
Conclusion: Temporary bilateral ovarian suspension can easily be achieved using the technique we describe. It makes pelvic side wall surgery easier without the need for additional instrumentation. We commend this simple technique to our colleagues.

## V-24

Laparoscopic debulking of an enlarged Obturator Fossa Lymph Node in a patient with recurrent endometrial cancer M Peiretti, GB Melis, S Angioni, A Loddo, V Mais
Division of Gynecology, Obstetrics and Pathophysiology of Human Reproduction, Department of Surgery, Maternal-Fetal Medicine, and Imaging, University of Cagliari, Cagliari, Italy

Objective: To report the feasibility of laparoscopic debulking of an enlarged obturator fossa lymph node in a patient with recurrent endometrial cancer.
Design and Methods: The patient is a 63 year-old woman, with a history of T1b G1 N0 endometrioid adenocarcinoma of the endometrium diagnosed in June 2002 when she underwent laparoscopic-assisted vaginal hysterectomy with bilateral salpin-go-oophorectomy and pelvic lymph nodes dissection (39 pelvic lymph nodes sent for pathology).
In December 2005 a routine follow-up pelvic ultrasound demonstrated an isolated 353025 mm left side pelvic lesion. No other evidence of disease recurrence or metastases was demonstrated by a CT scan in January 2006. In February 2006 she underwent laparoscopic debulking.
Results: Complete laparoscopic debulking of a matted obturator fossa lymph node was performed. Estimated blood loss was 50 cc and the operative time was 2 h and 30 min . There were no intraoperative or postoperative complications. The patient was discharged home on postoperative day 5 . Final histological evaluation of the specimen confirmed the recurrence of adenocarcinoma.
Conclusions: Laparoscopic resection of matted obturator fossa lymph nodes is feasible and apparently safe. In comparison with the traditional open approach, this procedure is associated with lower morbidity, quicker recovery, and decreased interval to onset of adjuvant therapy.

## V-25

## Trachelectomy- Daniel Dargent Operation

P George
CHU, Brussels, Belgium
This video will show the technique of trachelectomy. This patient was operate in November 2002 by Daniel Dargent. The tumour was an adenocarcinoma 25 mm large. The patient was 32 years old at the time of surgery. The pelvic lymph nodes where negative. 42 months later she is free of disease (Pet scan negative)The only side effect was dysmenorrhoea and it was relief by cervical dilatation.The details about number of cases around the world, recurrences, and results in term of pregnancy will be discussed.A new strategy to allow gynecologic oncologist to propose this alternative to their patients is developed.

## TOPIC 5: ENDOMETRIOSIS

## V-26

## Laparoscopic management of diaphragm endometriosis

H. Roman, M. Scotte, L. Marpeau

Rouen University Hospital, Rouen, France
A 25 -year old woman was referred to our department with severe dysmenorrhoea, chronic pelvic pain, dyspareunia, defecation pain and infertility. She also presented right shoulder pain during menses, which had begun one year before. Magnetic resonance examination revealed right endometrioma, fibrous lesions of the Douglas pouch and an increased T 1 signal of the surface of the right liver lobe. Endorectal ultrasound showed Douglas pouch endometriosis nodule involving rectal serosa. Laparoscopy was performed and the diagnosis of bilateral multiple endometriosis lesions associated with bilateral ovarian, pelvic peritoneal and rectal endometriosis was obtained. Two diaphragmatic lesions ( 4 and 2 cm large respectively) were excised and the others were treated by bipolar electrocoagulation. Peroperatively right pneumothorax occurred and was managed by peroperative right thorax catheter insertion and maximal lung inflation. The diaphragm repair was carried out using one suture. Pelvic endometriosis was treated by excision or electrocoagulation; rectal resection was not required. Postoperatively, right pleurisy occurred on day 2 and was managed by right chest drainage during 48 hours. The patient discharged day 8 . She underwent GnRH agonist therapy for 6 months. Five months following the surgery she was free of painful symptoms.

## V-27

Laparoscopic adhesiolysis of complete cul-de-sac obliteration and resection of a deep nodule after an incomplete resection of endometriosis using ultracision.
J.J. van Beek

VieCuri, Venlo, Netherlands

Introduction: Endometriosis with ovarian cysts is accompanied frequently by deep endometriosis too. This is not always recognized by the general gynaecologist to whom patients may present initially. As a result endometriosis might be left behind. Further, patients with endometriotic cysts are frequently operated by laparotomy still. Both elements may attribute to severe adhesions and continuation or worsening of infertility.
Methods: A seven minute video is presented of a patient with a history of cystectomy of endometriotic ovarian cyst by laparotomy, leaving a deep endometriotic lesion behind. Complete adhesiolysis and resection of the deep nodule is shown using scissors and the harmonic scalpel (ultracision).
Aim: To demonstrate a technique of further laparoscopic surgery in infertility patients with severe adhesions and previous incomplete resection.
Discussion: It is important to realize that endometriotic cysts are often just an expression of severe and deep endometriosis. Incomplete resection may worsen the change of a subsequent pregnancy.

## V-28

## Techniques of exposure in laparoscopy.

V Thoma ${ }^{1}$, N Waters ${ }^{2}$, M Hummel ${ }^{1}$, O Garbin ${ }^{1}$, A Wattiez ${ }^{3}$
${ }^{1}$ CMCO, Strasbourg, France, ${ }^{2}$ IRCAD-EITS, Strasbourg, France, ${ }^{3}$ Hopital de Hautepierre, Strasbourg, France

Objective: To improve widespread acceptance of laparoscopy for major and minor gynaecological surgery by demonstrating basic principles to exposure of the surgical field. The reputation of laparoscopic surgery for being complex, difficult to perform and to teach can be overcome by returning to fundamental surgical principles such as ergonomics and more importantly, adequate exposure.
Design and Methods: We demonstrate exposure techniques adapted to the surgical steps required in the treatment of various pathologies. University Hospital, France.
Results: By commencement of surgery with correct exposure of the surgical field, the surgeon can expect four major benefits. Firstly the assistant goes from being a sleeping and passive agent to an active and efficient co-surgeon. Secondly, surgical performance quickly improves by the attainment of greater comfort and confidence and improved ability of the surgeon to operate with both hands. Thirdly, surgical safety principles are reinforced, particularly during difficult moments. Fourthly, although this technique consumes several minutes at the start of surgery, good exposure will ultimately save time over the course of procedure.
Conclusion: One of the reasons for the lack of success of the operation is due to complexity and duration of procedure. One of the main factors affecting the capacity of the surgeon is ability to work with majority of instruments available and have good exposure which spares the assistant. In laparoscopy, as in conventional surgery the exposure is the key factor for the success of the procedure. Teaching adequate exposure should be an integral part of laparoscopic training.

## V-29

Ureteral endometriosis. Is re-implantation always necessary?
G. Vittori, A. Lena, P. Giovannini, R. Delfini, PL. Russo, R. Zeloni, F.M. Camilli

Ospedale San Carlo - IDI, Rome, Italy
Introduction: Urinary tract endometriosis represents $1-4 \%$ of all localizations and ureteral involvement is very rare ( $0.1-0.4 \%$ ) and may be caused by extrinsic or intrinsic disease with a clear prevalence of the extrinsic form. The object of the study is to propose a combined endoscopic treatment (ureteroscopic and laparoscopic) for conservative management.
Methods: We report three cases of extrinsic ureteral endometriosis observed between 2002 and 2006. Symptoms included pelvic pain refractory to medical therapy, hydronephrosis and hydroureter shown by ultrasonography and pyelography. Surgery was divided into two different stages. The first was diagnostic laparoscopy associated with retrograde ureteroscopy and dilatation of the ureteral stenosis by passing a balloon probe followed by ureteral stenting. Laparoscopic ureterolysis was performed one month later and at the time of this second procedure hydronephrosis had been resolved in all cases. In one case of combined extrinsic and intrinsic endometriosis endoscopic ureteral dilatation was not possible, conservative management was not indicated and partial ureteral resection and re-implantation was performed.
Results: All extrinsic cases were treated ureteroscopic dilatation and laparoscopic conservative ureterolysis associated with the removal of other sites of endometriosis (ovary, peritoneum, rectum). No operative complications occurred. The post-operative course was normal in all cases. The ureteral stent was removed three months after the procedure as the patients were well and remission of symptoms was observed. One patient become pregnant after surgery and at the moment is at 19 weeks of gestation.
Discussion: Ureteral endometriosis is rare but it can be a severe disease. Organ damage with potentially life threatening complications is possible. Conservative management is feasible and recommendable in extrinsic disease. Retrograde ureteral stenting and dilatation is necessary before surgery in order to preserve renal function and facilitate ureteral identification during surgical procedure.

## V-30

## Ultrasonographic appearance versus NMR of under-diagnosed endometriosis: adenomyosis and deep endometriosis

ME Coccia, F Rizzello, F Cammilli, E Castellacci, D Ippolito
Dept Gynaecology Perinatology and Human Reproduction, University of Florence, Florence, Italy, Italy

Introduction: To evaluate the accuracy of TVS for the diagnosis of adenomyosis and recto-vaginal endometriosis vs NMR.
Methods: Eight patients with adenomyosis and 15 with endometriosis of the recto-vaginal septum were selected and followed to TVS and NMR before surgery.
Results: Sonographic features of adenomyosis include myometrial heterogeneity, asymmetric thickening of myometrium, cysts, linear striations, and an ill-defined endometrium; recto-vaginal endome-
triosis appears as an infiltration of the recto-vaginal septum by endometriotic nodules or linear striations. The larger nodules can adhere to the anterior rectal wall. NMR showed well-known typical appearance. TVS diagnosis of adenomyosis and recto-vaginal endometriosis is possible, has to be search for, not easy to do and could be operator dependent.
Discussion: The specific features of adenomyosis and recto-vaginal endometriosis on TVS give a non-invasive diagnosis with a high degree of accuracy, thereby reducing diagnostic cost and delay of NMR, and selecting unnecessary invasive procedures.

## V-31

The laparoscopic excision of a Recto-Vaginal endometriotic nodule extended to the right pelvic side wall.
E.Ohana ${ }^{1,2}$, A.Wattiez ${ }^{1,2}$.
${ }^{1}$ I.R.C.A.D/E.I.T.S, Strasbourg, France, ${ }^{2}$ Hautepierre university hospital, Strasbourg, France.

Study Objective: To report and discuss the laparoscopic treatment of a Recto-Vaginal endometriotic nodule involving the pelvic side wall.
Setting: University hospital in France.
Patients: From November 2002 to June 2006, 93 patients with intestinal endometriosis underwent laparoscopic surgery for the excision of the implants. In all, the lesions were located in the anterior rectal wall, recto - vaginal septum and in the sigmoid colon. This is our first encountered case of disease involving the pelvic sidewall.
Interventions: We present a case of a 32 year old lady Grvida 0 , with severe dyspareunia and chronic pelvic pain. A large recto vaginal nodule was seen bloating in the proximal third of the vagina, the palpation revealed the lesion extended to the right pelvic side wall. Our strategy is: adhesiolysis, beginning the dissection laterally, perform complete ureterolysis in the right side affected by the disease, careful dissection of the retroperitoneal structures aside the disease trying to preserve nerve plexuses encountered and then complete excision of both lateral, vaginal and rectal parts of the nodule, in this case necessitating the overture of the vagina for the complete removal of the disease.
Measurements and results: This case demonstrates a rare extension of the endometriotic nodule to the pelvic side wall (in our series $1.1 \%$ ) emphasizing the necessity of meticulous preoperative assessment enabling operative strategy planning before the intervention. In addition, the advantage of commencing the dissection laterally is demonstrated in this case.
Conclusions: A thorough preoperative assessment including physical examination under general anaesthesia by an experienced pelvic surgeon is essential for the establishment of operative strategy and together with a deep knowledge of pelvic anatomy are crucial for the complete treatment of severe infiltrating endometriosis.

## TOPIC 6: MISCELLANEOUS

## V-32

## Gartner Duct Giant Cyst: abdominal approach of a rare case with no vaginal expression

F Osório ${ }^{1}$, P Ramoa $^{2}$, Z Sidiropoulou ${ }^{3}$, F Faustino ${ }^{3}$, A Setúbal $^{3}$
${ }^{1}$ Hospital Santa Maria, Lisboa, Portugal, ${ }^{2}$ Maternidade Julio Dinis, Porto, Portugal, ${ }^{3}$ Endoags, Lisboa, Portugal

Gartner Cysts derive from the distal mesonephritic / Wolffian ducts that failed to be reabsorbed and persist as vestigial remnants in the anterolateral vaginal wall. They should be treated preferably by marsupialization. Total excision may lead to profuse bleeding, damage of vital structures like ureter and major vessels, or might be technically impossible.
This is a case of a 36 years old woman, with primary infertility and a previous history of endometriosis. She had already done three laparotomies for a previous diagnose of big endometrioma with no findings of the disease in any of the surgeries. She presents to medical office with an ultrasound compatible with left endometrioma. At physical examination, we palpate a hard mass on the left side, more or less $150 * 100$, and the vagina was normal. Because of strong adhesions, laparoscopic exploration was very difficult and once on the pelvis, that was no evidence of endometrioma. We could palpate the mass behind the sigmoid. After dissection of the sigma, a cystic formation inside the abdominal lateral wall, all the way down to the vagina, was found.
The authors show a video of the laparoscopic surgery of Gartner partial cystectomy and marsupialization.

## V-33

The use of triple tourniquets to reduce intra-operative bleeding at laparoscopic myomectomy
P. Papalampros, L. Chapman, P. Gambadauro, D. Polyzos, N. Papadopoulos, A. Magos

Minimaly Invasive Therpy Unit \& Endoscopy Training Centre, University Department of Obstetrics and Gynaecology, The Royal Free Hospital, London, United Kingdom

Introduction: Leiomyomas (fibroids) are very common and a frequent reason for gynaecological referral because of symptoms such as menorrhagia, pelvic pressure symptoms and infertility. Myomectomy is an established treatment, and in suitable cases, this type of conservative surgery can be done laparoscopically. However, as with open myomectomy, intra-operative bleeding remains a potential problem.
We wish to describe the use of "triple tourniquets" at laparoscopic myomectomy, a technique we have adapted from conventional surgery.
Patients: Inclusion criteria include uterine size 14 weeks equivalent gestation, no more than 3 fibroids for removal with a maximum total diameter 15 cm as assessed by pelvic ultrasound. We always investigate the ovarian function and the uterine artery perfusion preand post-operatively.

Technique: A standard 4-port laparoscopy is performed. The uterovesical fold is opened and the bladder identified. A long No. 1 polyglactin tie is introduced via the suprapubic port and threaded around the cervix through small incisions in the broad ligament on either side of the uterine isthmus immediately lateral and superior to the uterine vessels and ureters. The suture is tightened over the anterior surface of the cervix using an extracorporeal Roeder knot; the suture is left long to allow for retightening if required. Additional No. 1 polyglactin ties are inserted and passed through the incisions in the broad ligament and tightened around the ipsi-lateral infundibulo-pelvic ligaments cephalad to the fallopian tubes and ovaries. Vascular occlusion is evidenced by a change in colour of the uterus. Laparoscopic myomectomy is then carried out in the usual fashion. At the end of the procedure, once the uterine incisions have been sutured, the ties around the infundibulopelvic ligaments are released, but the cervical tourniquet is retightened and left in situ to reduce post-operative oozing.
Results: We have used the technique in over 20 cases. As at laparotomy, bleeding from the uterine incision(s) is considerable reduced, and this is now our preferred technique for laparoscopic myomectomy.

## V-34

## Ultrasound guided laparoscopically assisted Cryomyolysis (PLC)

M Pansky $^{1}{ }^{1}$, M Frank ${ }^{1}$, D Schechter ${ }^{2}$, B.D Cowan ${ }^{3}$, S.E Zimberg ${ }^{4}$
${ }^{1}$ Asaf Harofe medical Center, Zerifin, Israel, ${ }^{2}$ Galil Medical Inc., Yokneam, Israel, ${ }^{3}$ University of Mississippi Medical Center, Jackson, MS, United States, ${ }^{4}$ Cleveland Clinic Florida, Weston, FL, United States

Study Objective: To present a new procedure, Ultrasound Directed Laparoscopically Assisted Cryomyolysis (PLC), for the treatment of uterine fibroids.
Design: Laparoscopically Assisted Cryomyolysis (PLC) is performed under laparoscopic visualization, with real-time transvaginal ultrasound guidance for precise insertion and placement of cryogenic needles. The Cryomyolysis procedure uses ultra-thin cryogenic needles and is performed in the OR with standard preparation for gynaecological laparoscopic procedure under general anaesthesia. Procedure time averages 60 minutes.
Setting: Pilot study carried out at three centers.
Patients or Participants: Pre-menopausal women with symptomatic uterine fibroids who completed childbearing.
Interventions: Uterine fibroids are treated in a percutaneous laparoscopic-assisted approach using ultra-thin (17G) cryogenic needles (Galil-Medical). TVUS and color doppler are utilized preop to assess number of fibroids, their size, location and blood flow. Cryoneedles are inserted percutaneuosly directly to the fibroid. Procedure is performed according to a predetermined freezing and thawing protocol.

TVUS monitors the needle's path through the fibroid tissue and determines optimal tip placement. Thermal sensors may be positioned in the fibroid tissue, between the cryoneedles or at the fibroid margin, to ensure complete ablation, and subserosal to minimize the possibility of adhesion formation. Iceball propagation and ice coverage of the fibroid is continuously monitored by TVUS. Measurements and Main Results: Safety and efficacy were evaluated by assessing the effects of cryoablation on uterine fibroid volume reduction as measured on US imaging and symptom relief as measured by a validated questionnaire (SSS-UFS-QoL; Spies, 2002).

Conclusions: Laparoscopically Assisted Cryomyolysis (PLC) using Galil Medical's ultra-thin cryogenic needles, combined with TVUS guidance, provides an easy to use, minimally invasive procedure for the treatment of symptomatic uterine fibroids in pre-menopausal women.

## V-35

The safety and efficacy of direct trocar insertion with elevation of the rectus sheath instead of the skin for pneumoperitoneum MZ Gunenc ${ }^{1}$, $\mathrm{N}^{\text {Yesildaglar }}{ }^{3}$, B Bingol ${ }^{1}$, G Onalan ${ }^{2}$, S Tabak ${ }^{2}$, B Fokmen ${ }^{2}$<br>${ }^{1}$ Istanbul Bilim University Metropolitan Florence Nightingale Hospital, Istanbul, Turkey, ${ }^{2}$ Ankara Research and Training Hospital, Ankara, Turkey, ${ }^{3}$ Zubeyda Hanim Dogumevi, Ankara, Turkey

Abdominal access in endoscopic surgery carries a finite risk of visceral injury. Bleeding, subcutaneous emphysema, gastrointestinal tract perforation, minor and major vascular injury, and intraperitoneal adhesions are the potential complications associated with abdominal access and creation of pneumoperitoneum. There are 4 basic techniques used to create pneumoperitoneum: blind Veress needle, direct trocar insertion, optical trocar insertion, and open laparoscopy. Veress needle and direct trocar insertion are blind techniques, and their use can result in severe visceral and vascular injuries. To prevent visceral and vascular injuries caused by the technique used for the creation of pneumoperitoneum, laparoscopic surgeons and gynecologists look for safe and effective laparoscopic access techniques. Direct trocar insertion without previous pneumoperitoneum was reported to be a safe alternative to Veress needle insertion. We carried out this study to compare the ease of use, safety, and efficacy of direct trocar insertion with elevation of the rectus sheath and blind insertion of the Veress needle in laparoscopic surgery. In 578 laparoscopic procedures, the patients were assigned to one of the following groups: blind insertion of the Veress needle (group 1, $\mathrm{n}=301$ ) and direct trocar insertion with elevation of the rectus sheath using 2 towel clips (group 2, $n=277$ ). Total complication rates were $15.7 \%(n=33)$ and $3.3 \%(n=4)$ in groups 1 and 2 , respectively ( $\mathrm{P}<0.05$ ). Direct trocar insertion with elevation of the rectus sheath using 2 towel clips is an easy, safe, and effective technique.
Keywords: laparoscopy, pneumoperitoneum, rectus sheath

## V-36

## Gasless optical entry at Palmer's Point in high risk patient

 S I Kayani, D J RowlandsArrowe Park Hospital, Wirral NHS Tust, Merseyside, United Kingdom

Introduction: The creation of safe pneumoperitoneum remains the most important part of a laparoscopic procedure. Approximately $50 \%$ of all laparoscopic complications may be attributed to entry technique. (Neudecker et al, 2002; Jansen et al, 1997). The risk becomes paramount in case of previous abdominal surgeries where the internal anatomy may be distorted due to adhesions. Many techniques and devices have been described to reduce risk. We report a case of direct gasless 5 mm optical entry at Palmer's point (PP) conducted safely in a high-risk patient
Methods: Case report with video footage of entry technique
Results: Safe and seamless entry into the abdominal cavity was achieved using a 5 mm optical entry assembly at Palmer's point with subsequent 10 mm umbilical trocar-cannula inserted under direct visualisation avoiding omental / bowel adhesions.
Discussion: PP has been described as a safe area for achieving pneumoperitoneum (Veress needle) in cases of previous abdominal surgery. Safe entry using direct trocar insertion without prior insufflation has also been described (Byron, 1993; Woolcott, 1997). Safe laparoscopic adhesiolysis was undertaken for a 126 kg 40 -yearold patient with a 20 -year history of severe pelvic endometriosis, who presented with significant chronic pelvic pain. Elsewhere she had previously undergone 9 laparoscopic excisions of endometriosis and adhesiolysis, and 3 laparotomies via transverse lower abdominal incisions culminating in total abdominal hysterectomy (2000) and open bilateral salpingoophrectomy (2002) when she was again found to have extensive adhesions.
5 mm gasless optical entry at PP allowed safe preliminary inspection of the umbilical area with 5 mm laparoscope and insertion of 10 mm umbilical trocar safely under direct vision avoiding omental / bowel adhesions. Video footage was undertaken. We believe this is a first case report illustrating this technique.

## V-37

## Triple adnexal teratoma

F Osório ${ }^{1}$, P Ramoa ${ }^{2}$, F Faustino $^{3}$, A Setúbal ${ }^{3}$
${ }^{1}$ Hospital Santa Maria, Lisboa, Portugal, ${ }^{2}$ Maternidade Julio Dinis, Porto, Portugal, ${ }^{3}$ Endoags, Lisboa, Portugal

Teratomas are the most frequent ovarian germ-cells tumors and they can be histological classified as mature (benign) or immature (malign). The most common benign tumor is dermoid cyst or cystic teratoma. The middle age of occurrence is 30 years old. Basically these tumors are asymptomatic but some may cause abdominal pain or/and appear as a palpable abdominal mass.
This is a case of a 34 years old woman with primary infertility, complaining of dysmenorrhea and dyspareunia referral to us as an endometrioma. On physical examination we found bilateral adnexal masses. The ultrasound and MRI shows a bilateral complex mass: borderline tumor of the ovary? Bilateral teratoma?

At laparoscopy the right ovary had a macroscopic appearance of borderline Vs carcinoma, and the left one looks like a teratoma. Right adnexectomy was performed and the specimen sent to pathology. The result was mature teratoma. For that reason we decided to performed a left cystectomy. After removal of the cyst, a second one shows up behind. A second cystectomy was performed, and again, pathology confirmed a double mature teratoma.
We show the film of laparoscopic surgery of this rare case of triple teratoma.

## V-38

## Gonadectomy performed for a 46XY primary amenorrheic female with a final diagnosis of gonadoblastoma

G Uncu, E.S. Ozyurek
Uludag University, Dept. of Obstetrics and Gynecology, Bursa, Turkey

A 16 years old female patient applied to the ambulatory care unit of our department complaining of primary amenorrhea on April 2006: she was epileptic and was receiving medical treatment (Tegretol 400 mg 3 X 1 ). No remarkable characteristics were found in her family history. At the initial evaluation: stature: 1.63 m ; weight: 55 kg ; eunicoid habitus. Her physical examination revealed: normal system findings; pubarche, adrenarche:(+); telarche:(+), tanner stage=2; mild clitoromegaly, hymenal ring was intact with no labial fusion, no gonads palpable in the major labiae or in the inguinal rings; hirsutism: (-). Her hormonal findings were: FSH:55,4 miu/ml, LH:21, $2 \mathrm{miu} / \mathrm{ml}$, Estradiol: $24 \mathrm{pg} / \mathrm{ml}$. Her karyotype was 46XY. Her abdominopelvic sonographic examination visualized a normally located uterus of normal size and image; and two hypoactive gonads of normal size in the pelvis with no suspicious mass, cyst or free peritoneal fluid. The patient was discussed in the academic consensus meeting and surgical exploration and gonadectomy was planned despite the seemingly normal pelvic findings and the patient having had children, so far. Laparascopy was performed by the authors. Laparascopic examination revealed a hypoplastic uterus displaced to the right hemipelvis with both round ligaments visible. The right gonad had adhered on the posterior leaf of the right ligamentum latum and had been covered with the right salpenx forming a conglomerate. Adhesiolysis was performed to free the right gonad and isolate the right infundibulopelvic ligament. The right gonad looked abnormal with an irregular, discoloured surface for which gonadectomy was performed, the specimen exteriorated with an endobag and sent for a frozen biopsy examination. The left ovary was not observable in the inguinal ring, and ligamentum latum was incised and the left retroperitonal space investigated up until the upper border of the false pelvis for the left gonad which could not be found. The result of frozen biopsy examination was gonadoblastoma of the right gonad. The operation was terminated and referred to the gynaecological oncology section following uneventful postoperative recovery.

