Measurements: The main parameters influencing surgeon's choice of mode of surgery were the size of fibroids preoperatively, number of fibroids (single vs. multiple), rapid growth and suspected malignancy, strategies to reduce intraoperative blood loss (uterine artery ligation, preoperative uterine artery embolisation) and preoperative use of LHRH analogs. The main outcomes analysed were post-operative haemoglobin drop, length of hospital stay and the weight of the fibroids on histology.

Main Results: In the laparotomy group the fibroids were bigger on clinical examination or by ultrasound, and were predominantly multiple. All patients with rapid growth or suspicion of malignancy were selected for laparotomy. Both groups had similar utilization rates of uterine artery occlusion strategies and of LHRH analogs. Blood loss as reflected by actual haemoglobin drop was similar between the two groups, but the length of stay was 1.9 times longer in the laparotomy group (p<0.05), with a mean of 5 days in the laparoscopic group compared to 7 days in the laparotomy group. The mean histological weight in the laparotomy group was 595 grams compared to 121 grams in the laparoscopic group.

Conclusions: Appropriate preoperative patient selection avoids unnecessary conversion of laparoscopy to laparotomy. Information that aides appropriate patient selection is the fibroid size on clinical examination and their number. If the fibroid is more than around 8 cm and especially if they are multiple, surgeons tend to select patients for laparotomy. This decision-making process works well in terms of postoperative blood loss since haemoglobin drop between the two groups is not significantly different.

### FC-93

# Preoperative ultrasound for uterine leiomyomas: is it trustworthy? A preliminary study

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Objective: To correlate the preoperative ultrasound examination with anatomo-pathological findings with regard to estimating the number and the size of myomata.

Methods: We performed a prospective study on 43 patients (aged 29–73 years, mean 51 years) who underwent surgical operation for uterine leiomyoma between March 2005 and May 2006.Ultrasound scans (US) were performed within 1 day of admission to the operating theatre always by the same experienced operator, using a Siemens Sonoline Antares sonographic scanner equipped with a 7, 5 MHz transvaginal probe. Number and size of myomata at ultrasounds were compared with anatomo-pathological (AP) findings. Patients were divided into three groups, one submitted to hysterectomy, one submitted to laparoscopic myomectomy and another submitted to laparotomic myomectomy. Furthermore, each surgical procedure was performed by the same team.

Results: preliminary results show that there is no significant difference between the number of leiomyomata at US and at AP in the three groups if the number of myomata is less than or equal to six, while a significant difference exists if the number of myomata is more than six (P=0.0269). The analysis of the size of myomata shows

that there is no significant difference between US and AP in the laparoscopic and the hysterectomy groups, while there is significant difference in the laparotomic group (P=0.0339).

Conclusion: our data shows that US is a good method to identify the size of myomata in laparoscopy and hysterectomy. The US downstaging in laparotomy is probably attributable to the relaxing of the muscle fibres of myomas after uterine extraction. US is also a good method to evaluate the number of uterine fibroids if they are less than or equal to 6, while it downstages when the number is above 6; is this the cut-off of US for uterine leiomyomas?

# **TOPIC 11: ENDOMETRIOSIS**

## FC-94

Limited segmental anterior rectal resection for the treatment of rectovaginal endometriosis: pain, quality of life and complications

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#### Introduction

This study assesses the long term response, complications and quality of life inpatients undergoing segmental anterior rectal resection for endometriosis.

The setting was a tertiary referral unit for the management of severe endometriosis.

Methods

Case note review and patient questionnaire. The study was a cohort one of all patients who had undergone a segmental anterior rectal resection for endometriosis within five years.

The main outcome measures included: surgical complications and overall subjective improvement. Dysmenorrhoea, dyspareunia, dyschezia and chronic daily pain were measured using a visual analogue scale. Quality of life was assessed using the EQ-5D questionnaire. Results

21 anterior resections were performed by laparotomy and 24 by laparoscopy.83% of patients felt that their pain was greatly improved or completely resolved. There were two anastomotic leaks. Histology confirmed deep endometriosis in 92% of rectal specimens. Mean Self-rated Health Status was significantly lower in the study group than in the background population.

### Conclusions

Segmental anterior rectal resection is a relatively safe procedure for very severe rectovaginal endometriosis. It appears to be a very effective treatment for rectovaginal endometriosis.

### FC-95

# Segmental colorectal resection in laparoscopic treatment of endometriosis: preliminary results

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Introduction. The incidence of bowel endometriosis is 5,3%–12%, the rectum and the rectosigmoid junction together account for 70% to 93% of all intestinal lesions. Adequate surgical treatment of severe deep endometriosis requires complete excision of all implants but bowel resection is still discussed. We describe preliminary results of our experience, as tertiary referral centre, in complete laparoscopic management of deep pelvic endometriosis with bowel involvement. Methods. From January 2003 to December 2005, we identified all patients treated in our unit with laparoscopic segmental colorectal resection for deep endometriosis. Inclusion criteria were: clinical and instrumental deep endometriosis with colorectal involvement confirmed by barium enema, severe pelvic pain non responsive to medical therapy or with desire or pregnancy and/or colorectal or ureter stenosis. Data analysis included: age, weight, BMI, previous history of endometriosis, preoperative symptoms, parity, gestation, infertility, operative procedures, operating time, conversion, intraand postoperative morbidity, recovery of bladder and bowel function, discharge from hospital.

Results. 192 patients underwent laparoscopic resection of endometriosis with segmental colorectal resection. Laparoconversion occurred in 5 (2,6%) cases. Twenty patients underwent transfusion. Major complications that required re-operation occurred in 20 cases (10,4%): 9 (4,7%) anastomosis leakages, 3 (1,6%) ureteral fistulae, 4 (2,1%) haemoperitoneum, 1 (0,5%) pelvic abscess, 1 bowel perforation, 1 intestinal obstruction and 1 sepsis. Median time to resume bowel function was 4 days; 48 (25%) women had urinary retention for more than 3 days, 20 (10,4%) ongoing at the discharge and 9 (4,7%) ongoing at postoperative control after 30 days. Three women had peripheral sensorial disturb and 5 had bowel anastomotic stenosis.

Discussion. Laparoscopic segmental colorectal resection for endometriosis is feasible and can be proposed to selected patients informed on the risk of complications.

## FC-96

Laparoscopic treatment of Deep Endometriosis: evolution of surgical approach, complications and Long-term follow-up results of a series of 528 Patients.

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Objective: To study the value and long term effectiveness of surgical treatment of deep endometriosis lesions. Setting: Departement of Obstetrics and Gynecology, University Hospital. Design & Methods: Five hundred twenty-eight women from 18 to 54 years, underwent to laparoscopy, were included in a retrospective study up to April 1985 to assess quality of life and symptomatic resolution at 6 months, 5 years, 10 years and 20 years follow-up. Laparoscopic Surgical treatment of Deep endometriotic lesions of the Rectum; Sigmoid Bowel, Bladder, Urether and Abdomen was performed. Totally surgical excision of lesion was performed in much more cases. Vaginal Excision was necessary in 205 patients (38,9%) and vaginal suture was performed by vaginal technique in 142 cases.

Results: The mean age was 32,7 years; the mean diameter of lesions was  $1,5\pm1$  cm and 45% of patients have previously treated for endometriosis. According to the AFS-R score patients were classified in Minimal stage in 17,2%; Mild in 25%; Moderate in 16,1% and Severe in 41,7% of cases. The recurrence of symptoms occurs in 24,8% of cases. Up 1985 to 2005 surgical technique has been changed from ablation, excision to excision in "reverse technique". However the more aggressive and radical technique has not increase the incidence of severe complications (16%).

Dysmenorrhea was significantly decrease after surgery (p=0.001); similar results were found for Dyspareunia (p=0.001). Long Term results and management are currently investigated to evaluate recurrence of pain, fertility, clinical symptoms and reoperations according to the radicality of excision.

Conclusion: Totally laparoscopic excision of Deep Endometriosis nodules is mandatory to ameliorate the quality of life of patients. A complete surgical treatment is mandatory to decrease number of complications in reoperatives occasions, amelioring the fertility rate. Results will be presented.

# FC-97

Pain, quality of life, and complications following ablation of superficial endometriosis using BICAP (ACME $^{TM}$  Medical )

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### Introduction

The purpose of the study was to determine the long term response, quality of life and levels of pain following BICAP (bipolar) diathermy of superficial endometriosis. The BICAP device provides narrowly focused bipolar diathermy which may be used in conjunction with suction/irrigation.

# Method

A retrospective Cohort study in a tertiary referral centre for the management of advanced endometriosis. The study sample included all patients who had undergone BICAP diathermy between 1999–2004 for superficial endometriosis stage I with no deep disease. These were sent a questionnaire to complete. The main out come measures included pain, time off work, dysmenorrheoa, dysparenuria, dyschezia where measured using a visual analogue scale. Quality of life was measured using the ED-5D questionnaire.

### Result

117 out of 226 patients responded to a questionnaire.

15% of patients had a complete resolution of pain and the pain was greatly improved in a further 39%; The pain was a little better in 16% and no better or worse in 27%.

The mean number of days off per month pre-operatively was 0.94 and post-operatively was 0.28. The mean self rated health state index (67) was lower than in the background population (82).

## Discussion

Ablation of superficial endometriosis with BICAP is an effective treatment for the disease. Surgery was associated with a reduction in the time absent from work. The results are comparable with those obtained by the use of laser.