TOTAL LAPAROSCOPIC HYSTERECTOMY IN THE GROSSLY ENLARGED UTERUS

Botchorishvili R.[1], Wattiez A.[2], Canis M.[2], Rabischong B.[1], Jardon K.[1], Pouly J.L.[1], Mage G.[1]

[1] Department of Obstetrics and Gynecology, Polyclinique de L'Hotel-Dieu, BD Leon Malfreyt, 63058 Clermont-Ferrand, France.

[2] Department of Obstetrics and Gynecology, C.H.U. Hautepierre, 67098 Strasbourg, France

Introduction: Avoiding laparotomy by performing laparoscopic hysterectomy, of various types, has been shown to be beneficial in a number of ways. Shorter recovery times, shorter length of hospital stay and convalescence period, and earlier return to work than after abdominal hysterectomy are some of the positive factors cited. However, it is often considered that there is a size limitation of 14-16 weeks' gestation to the feasibility of laparoscopic hysterectomy. Whilst a number of studies have shown that the laparoscopic-assisted vaginal hysterectomy (LAVH) successfully manages the large uterus, little has been published regarding a total laparoscopic approach.

Objective. To examine the practice and feasibil-ity of total laparoscopic hysterectomy (TLH) for uteri weighing 500g or more compared to other total laparoscopic hysterectomies performed for the management of benign gynecological diseases.

ISSN 1684-0461

Patients: All patients who underwent total laparoscopic hysterectomy during the period January 2000 to December 2003 were included. Inclusion criteria included all women with benign uterine conditions. Malignant pathologies were excluded from the assessment. Patients who had pelvic floor prolapse treated laparoscopically concurrently with laparoscopic hysterectomy were also excluded. Sixty-nine patients with uterus > 500g were compared to 537 patients with uterus <500g.

Characteristics	Uterus >500g N=69	Uterus <500g N=537
Mean age	47.1 ± 4.7	48.6 ± 6.7*
% C/S	10.1%	14.1%
Prior surgery		
- Laparoscopic surgery	17.4%	25.1%
- Pelvic surgery	22.6	29.7
Endometriosis	1.5%	6.0%
Mean BMI	25.0	23.7*
Post-menopausal	13.0%	20.3%
Preoperative analogues	60.9%	29.4%*
Mean uterine weight	677.9 (500-1500)	200.5 (11-498)*

Intervention. Total laparoscopic hysterectomy by the technic of Clermont-Ferrand.

Results. Patients with enlarged uteri had higher operating times and conversion rates, similar haemoglobin levels pre and post operatively, similar hospital stays, and lower complications rates compared to patients with non-enlarged uteri.

Procedures

TLH	Uterus >500g	Uterus <500g
+/- USO/BSO	88.4%	97.2%
- Adhesiolysis	20.3%	20.9%
- Other procedure	26.1%	29.8%
Mean hospital stay (days)	3.67	3.65
Mean surgical time (min)	135.8 (60-280)	106.4 (40-330)*

Conversion

Reason for conversion	>500g	<500g
Excessive hemorrhage	0	2
Anaesthetic problems	1	1
Emphysema	0	0
Urinary tract injury	0	1
Bowel injury	2	0
Access/exposure	6	13
Conversions to laparotomy	6	7
Converted to LAVH & laparotomy	0	1
Converted to LAVH only	3	9
TLH (type 4)	87.0%	96.8%*

Conclusion. A laparoscopic approach, by LAVH and TLH, is both feasible and beneficial in patients with enlarged uteri. The higher rate conversion may be as a result of cautiousness and extra vigilance with an operative case known to be of a greater degree of difficulty. Thus increased care with toilette and haemostasis may account for the lesser degree of complications in the group with enlarged uteri, particularly with regards to vault haematomas and infection. Most complications can be managed intraoperatively without reverting to laparotomy.

Total laparoscopic hysterectomy results in several advantages to patient – decreased hospital stay, and decreased convalescence. The longer learning curve is acknowledged. Once acquired, however, it can be seen from the data that it is safe and has low complication rates that are comparable to traditional laparotomic and vaginal approaches.