

IS MARGIN INVOLVEMENT MEANINGFUL IN LAPAROSCOPIC RECTAL RESECTION FOR ENDOMETRIOSIS?

A. Mephon^{1,*}, J. Loriau¹, V. Duchatelle², E. Petit³, O. Marty⁴, V. Molinie², E. Sauvanet⁵

1-Department of Digestive Surgery

3-Department of Radiology

5-Department of Obstetrics and Gynecology

2-Department of Pathology

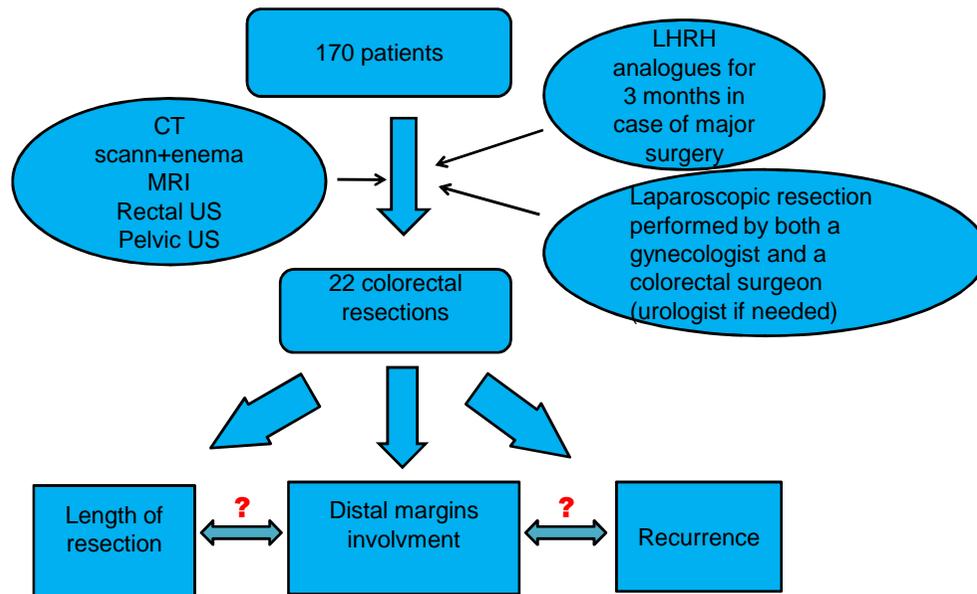
4-Department of Gastroenterology and Endoscopy

Introduction

Laparoscopic colorectal resection is common in case of deep infiltrating endometriosis. Surgeons' resection length is based on the macroscopical aspect of the bowel and established in order to perform complete resection. In case of proctectomy, increasing length of resection can lead to increased morbidity and diverting stoma rate. However neither the optimal resection margin nor the significance of microscopic margins involvement have been studied.

Method

Retrospective study on patients undergoing colorectal resections for endometriosis. Data from 170 patients treated from 01/2008 to today for endometriosis were extracted from our prospective database. Among them 22 underwent colorectal resections. Pathological results regarding length of resection, distal margins and margins involvement were studied to assess their influence on follow up and recurrence



Results

Surgery

- >22 colorectal resections
- >2 partial cystectomy
- >8 loop ileostomy
- >Distal Transsection level decided preoperatively at a normal part of the bowel
- >Side to end stapled colorectal anastomosis.
 - 2 upper third of the rectum
 - 15 median third
 - 4 low third

Mortality & Morbidity

- >No Mortality
- >1 major Morbidity (Pulmonary embolism)
- >1 conversion (lack of exposure in an obese patient)
- >1 anastomosis bleeding requiring reoperation.

Pathology

- >19 Rectal involvement
- >4 Sigmoid involvement
- >Median length of resection 13.9 cm(6-35cm)
- >All margins free from disease at gross examination
- >4 Microscopical margins involvement = R1

Margin involvement was not significantly associated with the location of the initial lesion, level of the anastomosis or length of resected bowel.

Cases of microscopical margin involvement are listed below

	Initial lesion	Level of anastomosis	Length of resection	Macroscopical Margin (cm)
Case 1	rectum	median	13	6
Case 2	rectum	median	15	5
Case 3	sigmoid	Median	18	5
Case 4	rectum	median	7	3

In one of the 4 patients undergoing R1 resection (25%) follow-up (18months) showed a pelvic relapse (ultrasonography). Any clinical or radiological sign of recurrence occurred during followup in cases with complete macroscopical and microscopical resection.

Conclusion

Rectal resection for endometriosis is guided by preoperative imaging. Bowel transection is performed considering pre-operative imaging and per-operative aspect of the bowel.

Both surgeons and pathologists can face microscopic margins involvement even if their gross exam concluded to complete resection

In order to determine if we must increase surgical distal margins, and accept increased morbidity and stoma rate, links between microscopical margins involvement and clinical relapse of endometriosis have to be assessed by large prospective studies