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MEDICAL, SOCIAL AND ECONOMIC IMPACT OF DEEP INFILTRATING ENDOMETRIOSIS

PhD Thesis abstract

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The thesis is structured in two main parts. The general part presents the current state of knowledge regarding deep infiltrating endometriosis. The experimental part is structured in three distinct parts.

Objective: The purpose of this retrospective review study was:

To assess the impact of surgery and quality of life for patients presenting painful deep infiltrating endometriosis (DIE).

To report the outcomes of surgical management of urinary tract endometriosis and discuss the choice between conservative and radical surgery.

To evaluate intraoperative and postoperative complications associated with laparoscopic management of rectal endometriosis by either colorectal segmental resection or nodule excision.

Patients and methods All patients with histologically proved infiltrating endometriosis who underwent surgery from January 2005 – December 2010 at the Department of Obstetrics and Gynecology I, Tîrgu-Mureş and the Department of Gynecology and Obstetrics, Rouen University Hospital-Charles Nicolle, Rouen, France were included in the study.

Surgical exeresis of endometriosis for patients with deep infiltrating endometriosis with GnRHa (Gonadotropin-releasing hormone) analogues treatment before and after the surgery. Preoperative data, surgical procedure data, and postoperative outcomes were analyzed.

We selected only women who had benefited from cystectomy (either full-thickness or up to the mucosa), ureteral segmental resection or ureterolysis were included. Women managed by this latter procedure were only included if the ureter was completely surrounded by a fibrous endometriotic ring, resulting in either extrinsic compression of the ureteral wall or intrinsic involvement of the ureteral muscularis or mucosa.

We defined „rectal endometriosis" as being deep posterior endometriosis involving muscular, sub mucosal or mucosal layers of the rectum, which had been assessed by magnetic resonance imaging (MRI) and endorectal ultrasound examination, which was then intraoperatively confirmed.

Data on patient's age, antecedents, previous treatment for endometriosis, intraoperative disease localization, MRI, and endorectal ultrasound examination were prospectively recorded in a computer database. Intra- and postoperative complications were checked from medical charts and specific survey questionnaires focusing on postoperative pelvic pain, digestive and urinary symptoms.

Results: One hundred fourteen subjects underwent operative laparoscopy for deep infiltrating endometriosis. Involvement of urinary tract was confirmed in thirty patients and the colorectal localization in eighty-four patients. Intra-operative finding according to American Fertility Society reviewed-classification (AFSr) score revealed stage I 6(5.3%), stage II 9(7.9%), stage III 18(15.8%), and stage IV 81(71.1%).

Data from 30 women pooled in the database showed 15 women presenting ureteral endometriosis, 14 women presenting bladder nodules, and 1 with both types of lesions. Ureterolysis was performed in 14 cases; the ureter was satisfactorily freed in 10 of these. In 4 women over 40 years old, who were undergoing definitive amenorrhea, moderate postoperative ureteral stenosis was tolerated and later improved in 3 cases, while the fourth underwent secondary ureteral resection and ureterocystoneostomy. Primary ureterectomy was carried out in 4 women.

Two cases of intrinsic ureteral endometriosis were found in 5 ureter specimens. Four complications were related to surgical procedures on ureteral nodules, and 2 complications followed the removal of bladder endometriosis.

Delayed postoperative outcomes were favorable with a significant improvement in painful symptoms and an absence of unpleasant urinary complaints, except for one patient with prolonged bladder denervation.

Surgical management of colorectal endometriosis were as follows: with "shaving" technique applied to 51.2% of cases, excision of the entire thickness of the nodule in 7.1% of cases, colorectal resection in 32.1% of cases.

Based on both postoperative pain and improvement in quality of life, all the women in the excision group and 82% in the colorectal resection group would recommend the surgical procedure to a friend suffering from the same disease.

Conclusion: Resection for deep endometriosis appears to relieve some symptoms. However, patients should be informed that pain may persist and that there is a risk of urinary and digestive side effects.

Conservative surgery, in association with postoperative amenorrhea, can be proposed in a majority of cases of urinary tract endometriosis. Although the outcomes are generally favorable, the risk of postoperative complications should not be overlooked, as surgery tends to be performed in conjunction with other complex procedures such as colorectal surgery.

Our study suggests that carrying out colorectal segmental resection in rectal endometriosis is associated with unfavorable postoperative outcomes, such as bladder and rectal dysfunction.

These outcomes are less likely to occur when rectal nodules are managed by excision. Information about complications related to both surgical procedures should be provided to patients managed for rectal endometriosis and should be taken into account when a decision is being made about the most appropriate treatment of rectal endometriosis in each case.

Key words: deep infiltrating endometriosis, urinary endometriosis, bladder, ureter, colorectal endometriosis, pelvic pain, medical treatment, postoperative complications.