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Management of Bladder Endometriosis

Jawad Kamoune, Achraf Med Grohs, Fatima Rahioui, Meryem Azerki, Z.Tazi, A. Filali, R.Bezad and M.H.Alami
National Centre of Reproductive Health, CHIS Mohamed V University, Rabat, Morocco.

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ABSTRACT

Deep pelvic endometriosis is a complex female pathology, of which it is necessary to understand the mechanisms in order to optimize their management. It is characterized by 3 types of lesions among which the deep lesions. These are defined by infiltration of the retroperitoneal space and / or pelvic organ wall [1]. Bladder lesions belong to this last category. Endometriosis can cause abdominopelvic pain and inconstant functional signs, the nature of which is often related to the localization of lesions [2]. To optimize and progress in the care of patients, it is absolutely necessary to attempt to understand the physiopathogenic hypotheses aimed at explaining the birth and development of the disease. The first part of the assessment is based on the interrogation which must be targeted and on a thorough clinical examination. Then comes the prescription of complementary exams, essential to exhaustive assessment of the lesions before developing a therapeutic strategy. The medical treatment has a suspensive purpose by an anti-gonadotropic effect. It is of little use in isolated bladder endometriosis. In case of failure of medical treatment, the surgical management of symptomatic deep endometriosis remains the reference treatment.

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INTRODUCTION

The prevalence of endometriosis is poorly understood and probably underestimated. It varies between 5 and 15% of women of childbearing age [3]. We estimate at 1 to 5% the incidence of urinary disorder [4]. Bladder disorder represent 25-85% of urological disorders according to the series [5] and may be isolated or associated with other pelvic endometriosis lesions.

PHYSIOPATHOGENY

Many theories have been advanced to try to understand the genesis of the disease, but none of them alone can explain the multiple locations.

During the nineteenth century appear the two main pathophysiological theories of pelvic endometriosis, that of metaplasia evoked by Waldeyer in 1870, and the tubal reflux developed by Sampson in 1927.

The tubal reflux theory of Sampson is appealing to explain the genesis of bladder endometriosis, since it follows the laws of gravity! The declivity of the vesico-uterine pouch makes it, like the Douglas' pouch, a natural place of collection of the endometrial cells returning by the fallopian tubes. The development (growth or involution) of the lesions then seems to be depending on various factors contained in particular in the peritoneal fluid and/ or under the control of haematogenous factors.

DIAGNOSIS

Interrogation is fundamental to guide the diagnosis and refine the preoperative evaluation of the endometrial disease, even though the diagnosis can only be truly confirmed by the histological study of lesions. Endometriosis is responsible for chronic pelvic pain and specific symptoms that may direct the practitioner to an anatomical location of deep endometriotic lesions [2]. The cyclic nature of the symptoms, that is, coinciding with a menstrual event, is very suggestive of endometriosis. Isolated bladder endometriosis is often poorly

symptomatic or even asymptomatic, and the main differential diagnosis is interstitial cystitis [6]. The disease can be revealed by premenstrual urinary function signs (dysuria, heaviness, cystalgia, pollakiuria and more rarely macroscopic hematuria if the bladder mucosa is affected), dyspareunia or catamenial pelvic pain in 75% of cases.

The clinical examination may be poor but must be thorough, guided by the interrogation and ideally performed in periods of menstruation. A nodule of bladder endometriosis can be palpated clinically in 50% of cases, in the form of a nodule sensitive to vaginal touch [7]. The limits of the clinical examination require the realization of complementary examinations to obtain a map as accurate as possible of the lesions of endometriosis. Pelvic ultrasound (suprapubic and endovaginal) remains the first-line examination, adapted to suspect deep endometriotic localizations, including bladder lesions [8,9]. It has the advantage of allowing exploration of the pelvic cavity at the same time. The ultrasound should be performed with a semi-replicated bladder to detect lesions located in the vesico-uterine pouch. In case of visible nodule, the diagnosis of crossing the muscularis is difficult. The main differential diagnoses are bladder tumors and anterior isthmus myomas. A renal ultrasound should eliminate a subclinical obstructive syndrome, in case of associated ureteric involvement. In this case, a renal scintigraphy must be done to eliminate functional impairment of the kidney.

Cystoscopy is the exam of choice in case of suspicion of bladder involvement. This Examination will result in a bluish lesion and a guided biopsy to confirm the diagnosis of endometriosis and to rule out differential diagnoses

MRI is becoming more accessible and appears as the most sensitive examination in the assessment of deep lesions thanks to a complete pelvic assessment.

For Balleyguier [10], this sensitivity varies according to the location of the lesions and reaches 71% to 88% for the diagnosis of bladder lesions.

The MRI can specify the degree of crossing of the muscularis.

The injection of gadolinium allows a better analysis of the bladder wall and the infiltration of the nodule. In addition, MRI with urinary time has the advantage of performing accurate imaging of the urinary tract when an obstruction is suspected.

THERAPEUTIC MANAGEMENT OF VESICAL ENDOMETRIOSIS

The main goal of medical treatments used in endometriosis is to rest the lesions by blocking gonadotropic function. Other treatments are purely symptomatic.

Currently, drugs that have obtained the MA for the treatment of endometriosis are the following (according to AFSSAPS, December 2005): NSAIDs: they treat pain and inflammation, but have no effect on endometriotic lesions, progestins anti-gonadotropic dose: they are prescribed continuously for 2 to 6 months and lead to glandular atrophy with pseudo-decidualization of the stroma, GnRH agonists: their duration of prescription is limited to a maximum of 1 year because of their side effects, related to an estrogenic deficiency induced; an "add-back therapy" can then be proposed beyond 3 months of treatment to reduce these side effects.

There is very little data available in the literature to assess the interest pre-surgical medical treatment for bladder endometriosis. Preoperative medical treatment may be justified in the presence of other endometriosis lesions and / or associated infertility, to facilitate surgical intervention, or in case of postoperative recurrence [11]. In practice, isolated and symptomatic bladder lesions should be treated surgically from the outset [5].

The goal remains conservative but comprehensive treatment in one intervention since the effectiveness of the surgical treatment depends on the radicality of the gesture [12,13]. There is many studies proving the feasibility of laparoscopic treatment of vesical lesions: partial bladder cystectomy [4,13-15].

CONCLUSION

The cyclic character of abdominopelvic pain is very suggestive of endometriosis and the fundamental questioning allows the urinary, gastrointestinal and gynecological evaluation which guides the clinical examination and the paraclinical assessment. Endometriotic disease should benefit from a multidisciplinary approach; a medical treatment can be attempted at first, in particular to control chronic pelvic pain

and dysmenorrhea, but in the case of an isolated bladder endometriosis, the management can be immediately surgical: the resection of the nodule must be complete and practiced by specialized teams: laparoscopic partial bladder cystectomy. As with all functional pathologies, benefit and risk will be weighed against each other to improve the quality of life of women with endometriosis.

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