

BLADDER ENDOMETRIOSIS: EFFECTIVENESS OF THE CLINICAL EVALUATION AND DIAGNOSTIC TESTS FOR AN ACCURATE TREATMENT.

Hypothesis / aims of study

The incidence of bladder endometriosis is generally considered about 1% or less of endometriotic patients. Bladder endometriosis is often not diagnosed during laparoscopy, because it is a disease involving the vesical detrusor and therefore may not be visible on the peritoneum covering the bladder. In this setting, the identification of a group of patients at a higher risk for this condition becomes necessary. The American Urologic Association Symptom Index (AUASI) is a questionnaire which was originally created to assess the severity of benign prostatic hyperplasia, but has been found to accurately describe lower urinary tract symptoms in women. Fedele et al. partially modified this questionnaire with the aim of assessing the presence of specific catamenial symptoms related to bladder endometriosis in patients with a high suspicion index for this disease.

The aim of this study is to evaluate the effectiveness of preoperative exams and the treatment in patients with bladder endometriosis.

Study design, materials and methods

We conducted a retrospective observational study. In the period between January 2001 and December 2010, 574 patients underwent surgery for endometriosis at our institution. In 8 cases (1.4%), bladder endometriosis was confirmed at histopathological examination. All patients underwent transvaginal preoperative ultrasonography. Selected patients underwent CT, MRI or cystoscopy. All women were retrospectively asked to complete the questionnaire modified from the AUASI, of which three questions that were designed to assess irritative symptoms, especially during the perimenstrual period, were added to replace three questions concerning obstructive symptoms. The cut-off greater than 9 was considered suspicious of bladder endometriosis, according to previously published data.

Results

The mean patient age was 33.1 years-old. Urinary symptomatology was present in 7 cases (87.5%). The mean questionnaire's score for patients with bladder endometriosis was 15,75 (6-19). In 7 patients (87.5%), bladder endometriosis had been preoperatively diagnosed by means of transvaginal ultrasound, CT, MRI and/or cystoscopy, whereas in one patient it was unexpectedly found at surgery. Interestingly, we observed in two patients who had urgency and hematuria coinciding with menstruation, in which cystoscopic examination performed at this phase of the menstrual cycle showed a proliferative bladder lesion, but was not present when cystoscopy was performed in mid-cycle menstrual.

Treatment consisted of partial cystectomy in six patients and transurethral resection of the bladder in the remaining two patients. No patient who underwent a partial cystectomy recurred. One of the patients who underwent only transurethral resection of the bladder experienced a relapse and the surgical procedure was repeated. At the moment, she is free of disease.

Interpretation of results

Urinary tract endometriosis is an uncommon pathologic finding. Most of our cases had urinary symptoms with a high score on the modified AUASI questionnaire.

The use of transvaginal ultrasound in patients with endometriosis can minimize the risk of neglecting bladder endometriotic lesions during surgery.

The cystoscopic evaluation in catamenial phase is very important for the assessment of these lesions. But the limits of the cystoscopic evaluation must be considered, as often there is no involvement of the mucosa. However, in the majority of cases there is a fixed protuberance that deforms the inner bladder profile and that undermines the mucosa, presenting with bluish-reddish areas that are suggestive for endometriosis.

Surgery is the treatment of choice. It is possible to perform a transurethral resection of the tumour, but we believe laparoscopic or open partial cystectomy should be considered the best option in selected cases, depending on the extent and location of lesions.

Concluding message

With the limitations as being a retrospective study with a small number of cases, therefore, we believe that the questionnaire evaluated in the present study showed an excellent diagnostic accuracy in the preoperative diagnosis of bladder endometriosis.

The cystoscopic evaluation in catamenial phase is very important for the management of bladder endometriosis.

Partial cystectomy is the treatment of choice.

References

1. Evaluation of a new questionnaire for the presurgical diagnosis of bladder endometriosis. Fedele L, Bianchi S, Carmignani L, Berlanda N, Fontana E, Frontino G. Human Reproduction 2007.22:2698–2701.

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<i>Was this study approved by an ethics committee?</i>	No
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<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes