

Vaginal endometriosis

Two case reports and review of the literature on rare urogenital sites

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Summary: The authors present two rare cases of vaginal endometriosis. Moreover, the literature regarding other sites of low genital tract involvement is reviewed.

Key words: Vaginal endometriosis.

INTRODUCTION

Endometriosis consists of the presence of functioning endometrial tissue outside its normal site in the lining of the uterine cavity while Adenomyosis is limited to myometrial infiltration^(1, 2, 3).

Fifteen to twenty percent of fertile women are suffering from endometriosis. The disease is usually confined to the ovaries, fallopian tubes, uterine ligaments, uterovesical peritoneum, rectovaginal septum, and pelvic peritoneum, though remote sites such as the vagina, cervix, ureters, and bowel may be affected as well^(1, 3, 4, 5).

The urinary tract is, however, involved only in 1% of the cases (the bladder in 84%, and the urethra in only 2%). Vaginal endometriosis is revealed in only 1-3% of all the cases^(1, 6, 7, 8); the cervix is affected in 2.5% of the cases (diagnosed by colposcopy in 0.1-0.5% of the cases)⁽⁹⁾, while the vulvar site is involved in 0.2%^(1, 6, 7, 8, 9, 10).

Two cases of endometriosis located on the anterior and posterior vaginal walls, recently observed in our Institute, are reported.

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CASE 1:

A.C., a 31 year old woman, menarche at age 14, regular cycles, PARA 2002 (two eutocic deliveries with episiotomy), presented with a tumescence of the anterior vaginal wall, premenstrual and menstrual dysuria and dyspareunia intensified after the last delivery (7 months before). She had been taking the pill for the last 3 months.

A brownish, mass 4 cm diameter floating and tender to palpation was present at the pelvic examination, located on the anterior vaginal

wall, between the upper cervical lip and the urethra.

The Laboratory routine findings and screening for pelvic endometriosis were negative.

Positive pressure systourethrography revealed an "ab estrinsecu" anterior urethral imprint.

During surgery, detachment of the vaginal cystic mass proved difficult because of its contiguity with the bladder and the fibroretraction of the vagina.

When the lesion was incidentally ruptured, a chocolate colored material was seen. Suture of the vagina with reabsorbive material was performed followed by a regular postoperative period. Histology confirmed endometriosis.

CASE 2:

Z.G., a 42 year old woman, menarche at age 11, regular cycles, PARA 2012 (eutocic deliveries with episiotomy) underwent myomectomy and monolateral ovarian resection (for a simple ovarian cyst) (1990).

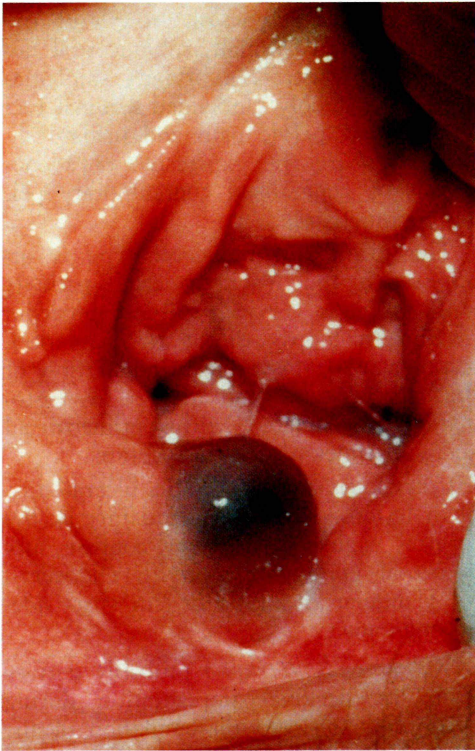


Fig. 1. — Endometriotic nodule of the posterior vaginal wall.

Dyspareunia and premenstrual tenesmus during the last two months were present.

A 2 cm diameter mass, located on the lower third of the posterior vaginal wall was seen.

The lower pole of the mass was in the proximity of the perineal raphae (Fig. 1).

The cyst was filled with brownish material and its surface was regular and shiny. Pelvic examination revealed a relatively fixed cystic mass.

Laboratory routine findings were regular and no other endometriotic implants in other sites were present.

A rhomboidal incision of the vaginal posterior wall including the cystic mass was performed, with local anesthesia, followed by a accurate control of the rectal intact mucosa to which the lesion was firmly adhered. Suture of the vaginal wall with reabsorbive material was performed followed by a regular postoperative period.

Endometriosis was histologically confirmed.

DISCUSSION

Usually multiple endometriotic involvement of various organs or tissues is seen; unique localization has been reported only in one-third of the cases (¹⁰).

A positive pelvic surgical history is revealed in approximatively 50% of the cases (^{1, 6}).

The second case report had had a positive surgical history. Iatrogenic transplantation of endometrium may occur in an abdominal incision or in other ectopic sites following any surgical procedure in which the uterine cavity is opened (¹). Endometriosis may also develop in cervical and vaginal lacerations and in episiotomy incisions. Such transplantation depends upon estrogen support and is inhibited by infection (¹¹).

Some other theories of the histogenesis of endometriosis, have been formulated: a) hembryologic and metaplastic; b) hematogeneous and lymphatic dissemination; c) hormonal theories (undifferentiated tissue induction); b) retrograde uterotubal menstrual flow (³); e) genetic predisposition and immune alterations (¹²).

Vaginal endometriosis is considered a secondary implantation of Douglas pouch or rectovaginal septum endometriotic foci. It might also be due to a surgical dissemination following colpoperineal reconstructions. The most common localization is the posterior vaginal fornix and the cyclic development of the cystic mass produces dyspareunia mostly in the perimenstrual period⁽²⁾.

The endometriotic nodule usually has external submucousal development so that its colour turns into red, blue or brown. Rupture of the nodule is more likely to occur when very superficial and causes a bloody ulcerating lesion. It contrast, if the endometriotic lesion is embedded and penetrates deeply into the vaginal wall, the involvement of the urethra, bladder and rectum with subsequent dysuria, pollakiuria, recurrent cystic pain, tenesmus and dyschezia are frequently noted. Dysuria may be due either to bladder dislocation or to urethral compression and deformation, in relation to the size and site of the node. Mucousal vesicles and rectal ulceration with haematuria and cyclic rectorragia are rare events^(2, 13).

It is of paramount importance to perform an accurate inspection during the gynecologic examination; moreover, increased pain to palpation in the perimenstrual period is a valuable diagnostic sign^(13, 14, 15).

Vesical endometriosis is a relatively rare pathology⁽³⁾. The first case of vesical endometriosis was reported in the literature by Judd in 1921⁽¹⁶⁾. Since then, more than 150 cases have been reported in the urologic literature, as the result of increasing awareness of this clinical entity^(1, 17).

The most frequent site of vesical endometriosis is the trigone; sometimes the lateral wall and the vault may be involved⁽⁶⁾.

Clinical symptomatology is non specific, but the triad of pollakiuria, dysuria

and haematuria related to the menstrual cycles related is pathognomic^(1, 3). Of the patients with bladder endometriosis, 80% reported a sense of suprapubic discomfort which can be quite minimal; menuria is a rare event (25% Asbeshouse; 28% Moore). Urinary retention and incontinence were also described⁽⁶⁾. Dysuria, if present, often displays a cyclical course.

The diagnosis of urinary tract endometriosis is generally difficult and requires in addition to a correct clinical approach specific biologic and instrumental examinations though the use of ultrasound, CT scans⁽³⁾, MRN⁽¹⁸⁾ intravenous urograms and cystoscopy plus biopsy^(1, 3, 6).

Cervical endometriosis may be classified as primary or secondary in relation to the size and type of growth of the implants so that, small, submucousal nodules may illustrate a primary implantation while deeply embedded stromal foci which cause pelvic pain and urinary disturbances are the expression of adenomyosis or generalized contemporary pelvic endometriosis.

The primary, submucosal type is often seen in fourth - fifth decade patients with previous cervical surgical procedures such as biopsy, diathermocoagulation, colpoplasty or instrumental dilatation of the cervical canal and may be asymptomatic or associated with perimenstrual and sometimes postcoital spotting.

Colposcopy shows a cystic, ulcerated or plain lesion. Biopsy is mandatory as the cervical vaginal smear may confuse submucousal endometriosis with endocervical glandular dysplasia or "in situ" adenocarcinoma^(9, 13, 19).

Vulvar endometrioma probably derives from the decidual implantation during episiotomy or from dissemination of the menstrual endometrium in a traumatized area and is mostly located on the posterior fourchette⁽²⁰⁾. Small nodules near

the external inguinal orifice might suggest their metaplastic origin is from pelvic peritoneum cells accompanying the round ligament⁽¹³⁾. Fine needle aspiration biopsy is useful for diagnosis revealing typical glandular and stromal cells⁽²¹⁾.

Endometriosis can undergo malignant transformation: it occurs most commonly in the ovary. In extraovarian tissues, such progression comprises approximately 25% of all such transformations, the recto-vaginal septum being the commonest site for malignant transformation in extragonadal endometriosis⁽²²⁾.

Only seven cases of endometrioid adenocarcinoma developing from vaginal endometriosis have been reported⁽²³⁾ but not all cases satisfy Sampson's criteria which prove the primary origin of the tumour from the endometriotic site (I. clear examples of endometriosis were present in close proximity to the tumour; II. no other primary site could be found; and III. the histological appearance was such that it was possible its origin was from endometriosis)⁽¹⁴⁾.

Treatment of pelvic and extrapelvic endometriosis may be classified broadly into three categories:

1) hormonal (oestrogen-progestinic combination, danazol, GnRHa)^(1, 24);

2) radiotherapeutic (poor surgical risks, extensive involvement of the bladder, women approaching menopause)⁽¹⁾;

3) surgical^(1, 3, 17, 25).

The therapeutic choice must be based on the patient's age, marital status and desire for future pregnancies, the extent of the lesions and severity of the symptoms.

Small vaginal lesions (<1 cm) in addition to a traditional approach may undergo laser CO₂ vaporization⁽²⁶⁾.

In uncomplicated vesical isolated endometriosis, endoscopic electrical fulguration followed by medical therapy may be sufficient⁽⁶⁾.

CONCLUSIONS

In both our cases, only surgery was performed, but usually the patients with uncommon endometriotic sites need a further accurate evaluation in order to diagnose eventual contemporary pelvic endometriosis. Adequate therapy (E.P., Danazol, GnRH analogues and surgery) is subsequently required in these cases.

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