World Journal of Pharmaceutical and Life Sciences
WJPLS
www.wjpls.org
SJIF Impact Factor: 6.129

ENDOMETRIOSIS IN EPISIOTOMY SCAR: ABOUT A CASE

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Article Received on 29/01/2021 **Article Revised on 19/02/2021** **Article Accepted on 09/03/2021**

ABSTRACT

External endometriosis is an ectopic localization of tissues whose morphological and functional characteristics are those of the endometrial mucosa. Diagnosis is relatively easy in women between 20 and 40 years of age with catamenial symptoms. Computed tomography and magnetic resonance imaging can be used to diagnose parietal endometriosis. The treatment of these lesions is based on surgical excision.

KEYWORDS: Endometriosis, Delivery, Magnetic Resonance Imaging, Surgical Excision.

INTRODUCTION

External endometriosis is an ectopic localization of tissues whose morphological and functional characteristics are those of the endometrial mucosa. It is found in 10 to 20% of women in genital activity. It occurs in about 0.1% of scars from gynecological-obstetrical procedures.[1]

Diagnosis is relatively easy in women between 20 and 40 years of age with catamenial symptoms.[2]

Abdominal parietal endometriosis has been described in various locations, including

The abdominal wall (rectus abdominis muscles) and the umbilicus.[3,4]

Caesarean section scars.[5,6]

Skin and adjacent tissue from abdominal or pelvic surgery scars.[7,8]

At the site of an amniocentesis needle passage.[4]
- Laparoscopic trocar openings.[9]
- The episiotomy scar

We report a case of endometriosis on episiotomy scar in the gynecology and obstetrics department of the Ibn Rochd hospital in Casablanca.

OBSERVATION

A 29-year-old woman was hospitalized for surgical management of a perineal swelling. She gave birth by vaginal delivery with episiotomy 5 years before her admission. This patient had no particular medical or surgical pathological history. She consulted for cyclical perineal pain, accentuated during menstruation, for 1 year, without dyspareunia, without metrorrhagia, without urinary or digestive disorders. The evolution has been marked by the appearance of a swelling opposite the scar of the episiotomy scar, bluish appearance, painful, with skin modification opposite. The patient evolved in a context of conservation of the general state (figure 1). The clinical examination found a nodular mass opposite the episiotomy scar of about 20/20 mm, painless and with opposite skin modification (figure 1). The gynecological examination and pelvic touching were without peculiarities.

Endovaginal ultrasonography: A hypoechoic, well-limited, rounded, anechogenic area measuring 48x37 mm was present in the right para-vulvar soft tissues opposite the episiotomy scar, measuring 48x37 mm (figure 2).

A pelvic magnetic resonance imaging (MRI) established the presence opposite the left anus levator muscle inter-vagino-rectally of a well limited oval formation of irregular contours described measuring 42x20x41 mm. (figure 3). A wide surgical resection was performed (figure 4). Histological examination of the surgical specimen confirmed its endometriotic nature.

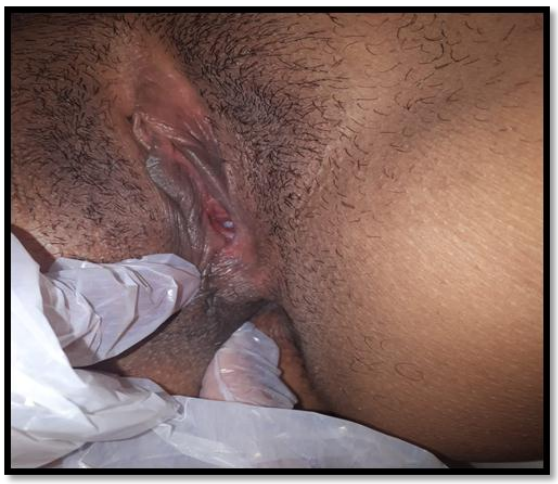

Figure 1: Nodular swelling opposite the episiotomy scar with skin modification.

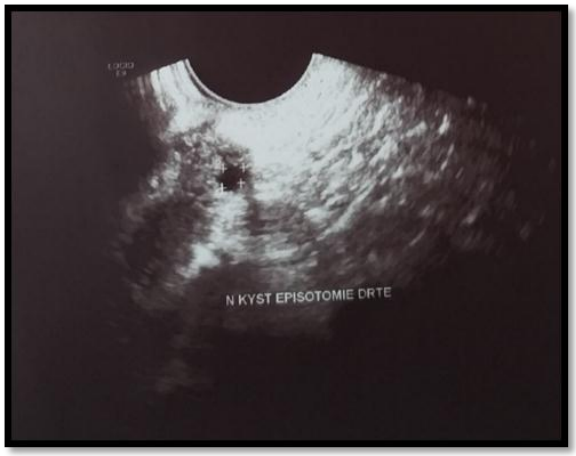

Figure 2: Endovaginal echography: Presence of a hypoechoic, well-limited, rounded, anechogenic area measuring 48x37 mm in the right para-vulvar soft tissues opposite the episiotomy scar, well limited.

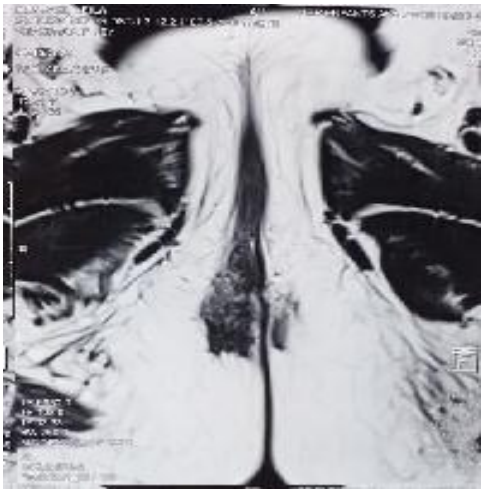

Figure 3: Pelvic Magnetic Resonance Imaging (MRI) established the Presence opposite the left anus levator muscle inter-vagino-rectally of a well limited oval formation of irregular contours described measuring 42x20x41 mm.

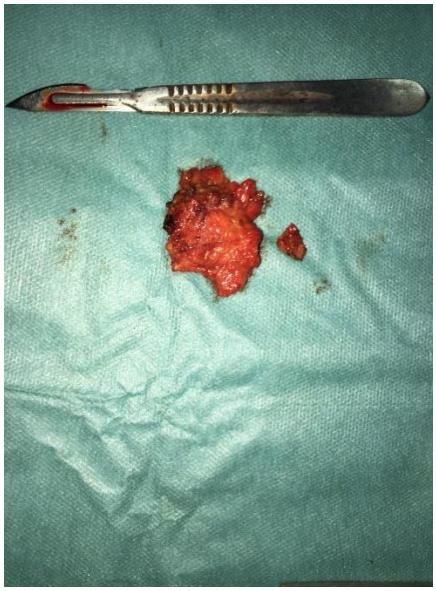

Figure 4: Postoperative image of endoetriosise on the episiotomy scar.

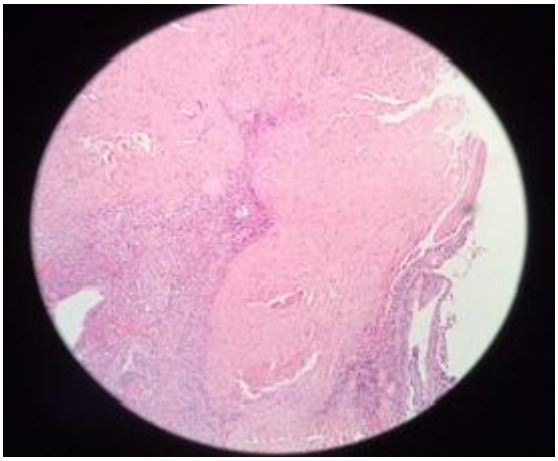

Figure 5: 4x magnification showing endometrial gland and stroma.

DISCUSSION

Scarring endometriosis is due to the implantation of endometrium at the level of a scar. The delay of appearance of these lesions can, in some cases, be several years as in the case of our patient who had a delay of 5 years. However, in rare cases, these parietal localizations can be observed without prior surgery, such as the endometriosis lesions described at the level of the umbilicus or the abdominal wall. The various localizations of scarring endometriosis are as follows: Pfannenstiel scar, laparoscopic scar, umbilical scar (hernia cure), episiotomy scar, hysterectomy scar (vaginal dome).

The pathophysiological mechanism is not well known. It is probably multifactorial. Several theories have been proposed to explain endometriosis lesions. The first theory was the reflux theory; endometrial cells implanting ectopically come from the reflux of menstrual blood through the fallopian tubes. For the second, the

metaplastic theory, cells of the coelomic epithelium under the effect of various stimuli undergo endometrial cell metaplasia. Finally, the metastatic theory would explain certain extragenital lesions by venous or lymphatic dissemination. For parietal endometriomas, the most probable mechanism is the local grafting of endometrial cells that will develop in a particular context,[1,9,5,10] Endometrial cells have a high potential to develop in non-epithelialized areas.[11] Their development is also favored by secondary inflammation induced by immunological factors. Metaplastic theory has also been proposed to explain parietal endometriomas. The endometrioma arises from primitive pluripotential mesenchymal cells that undergo specific metaplastic differentiation.[1]

In the multicenter study of the endometriosis study group, parietal endometriosis mainly affects women with genital activity between the ages of 20 and 40.[4] The age of our patient was 30 years. Erin et al,[12] reported a case of scarring endometriosis in a postmenopausal woman.

Clinically, the main manifestation usually corresponds to nodular, inflammatory, persistent infiltration of a parietal scar. This lesion is painful and catamenial.[4] This infiltrating, nodular, painful and cyclic nature of the lesion was found in our patient.

Parietal endometriosis can occur several weeks or years after surgery.[4] Koger et al.[13] report an interval of 1 to 20 years (mean 4.8 years) between surgery and the onset of symptoms. Zhao et al.[14] found a correlation between the latency period and the age of patients at the onset of symptoms. It should be noted that the delay between the causal intervention and the onset of endometriosis is highly variable.[4] It is usually a few months but can sometimes be very delayed, as we have observed in our observation. The catamenial character, i.e. the exacerbation of these non-specific signs during menstruation, is an important element of the diagnosis.

The ultrasound aspect of parietal endometriosis is variable. It is most often a very limited, tissue-hypoechoic mass. However, the lesion may be cystic, mixed or solid.[15] Color Doppler ultrasound shows a mass that is often highly vascularized with dilated afferent vessels.[16]

CT and magnetic resonance imaging (MRI) can be used to diagnose parietal endometriosis.[17] However, most authors report the absence of characteristic signs in imaging because the aspects observed depend on several parameters: distribution between stromal tissue and glandular elements, hemorrhagic character of the lesion and importance of the peripheral inflammatory reaction.[11] MRI, more than CT, is the examination of choice to confirm the diagnosis in case of doubt, as it allows the iron content of haemosiderin deposits in endometriomas to be revealed. Observations of parietal endometrioma on MRI are exceptional. MRI is more sensitive than CT for the detection of small lesions.[18] The lesion signal is variable depending on whether the intralesional hemorrhage is acute (hypersignal T1) or chronic (heterogeneous signal). Parietal endometriosis gives MRI an image of an iso or hypointense nodule in T1 and T2, punctuated by hyperintense foci in T1 and T2. Recent bleeding gives a hypersignal in T1 and T2. While the haemosiderin residues, resulting from previous bleeding, give a hyposignal in T1 and T2. The technique used must be rigorous, as lesions can be small and difficult to diagnose. In practice, T2-weighted sequences must be performed in all three planes of space, with a T1 and T1-weighted plane in spin echo with fat suppression (usually axial plane). The thickness of the sections is 5 mm, with a spacing of 0.5 mm. The bladder should ideally be in semirepletion, in order to obtain a medium anteversion of the uterus. Injection of gadolinium is not necessary, except in cases of suspected bladder endometriosis. MRI can be performed at any time during the cycle, but the detection of lesions is sometimes easier if the examination is performed during the menstrual period.[8,15,19]

Although clinically suspected, parietal endometriosis can only be diagnosed by pathological examination of the lesion. Indeed, this is typical and reveals endometrial glands of varying sizes often of cystic type associated with a cytogenic chorion and lymphocyte inflammation. The ectopic situation of these endometrial glands thus corresponds to the diagnosis of external endometriosis.[4,8,20] Immunohistochemical steroid receptor assays, using specific monoclonal antibodies, find estradiol and progesterone receptors in both the glandular and the stroma, but the distribution is very heterogeneous.[4,6] Recent progress in immunohistochemistry has shown that CD 10 is not expressed in glandular epithelial cells in endometriosis, but rather in the stroma, whereas it is expressed in other epithelial cells.[21] In contrast, COX-2, a prostaglandin hydroperoxidase, is expressed in the endometrium with production of PGE2 and PGF2a.[21] The combination of estrogen or progesterone receptor antibodies on the nuclei and CD10 or COX-2 antibodies on the cytoplasm may increase the certainty of diagnosis for ectopic endometriosis.[21]

The treatment of these lesions is based on surgical excision. This excision should be as wide as possible in order to remove the entire lesion, as the lesion may recur if the excision is incomplete. This is the only way to confirm the diagnosis by pathological examination and to achieve healing.[1,4,6] Laparoscopy is not recommended in the search for pelvic lesions.

Malignant transformation of endometriosis is rare. According to Takai et al,[16] the malignant transformation of endometriosis occurs in 0.7-1% of cases.[22]

Prevention may be proposed in patients with pelvic endometriosis lesions, but there is no evidence of

efficacy. It consists of protection of the wall with surgical drapes during a Caesarean section, irrigation or pressure saline cleansing of the wall at the end of the Caesarean section.[4,6,11] During the closure of a hysterotomy, it is necessary to ensure the quality of the closure and to put back in place any endometrial invagination, all the more so as the Caesarean section is performed early in the pregnancy.[4,6]

CONCLUSION

Scar endometriosis must be mentioned in front of any mass sitting on the scar of a surgical operation, even after menopause. The catamenial nature of the pain guides the diagnosis. The preoperative diagnosis is based on MRI and will be confirmed by histological analysis to exclude any other tumor. Medical treatment with GnRH analogues is ineffective. Surgical treatment consists of a broad resection of the mass. Laparoscopy for pelvic lesions is not recommended.

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