RESEARCH ARTICLE

DEEP PERINEAL ENDOMETRIOSIS ON EPISIOTOMY SCAR: ABOUT A RARE CASE
L'ENDOMETRIOSE PERINEALE PROFONDE SUR CICATRICE D'EPISIOTOMIE: A PROPOS D'UN CAS RARE

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Abstract

Endometriosis is one of the most common disorders involving women of reproductive age. It generally occurs in the pelvis, particularly in the broad ligament, round ligament, ovaries, fallopian tubes or uterosacral ligament. However, many unusual sites have been described, including the umbilicus, cesarean section scars, hernia sacs, appendix, vagina, vulva, omentum and perineum [1]. The incidence of endometriosis at the episiotomy site is quite rare. The typical clinical history and local findings enable us to make the correct diagnosis of the case. A case of deep perineal endometriosis on episiotomy scar was encountered. The treatment of choice is complete surgical excision of endometrial tissue and usually obtains permanent cure. The possible pathogenesis of endometriosis and various modality of treatment were also discussed.

Introduction:

The occurrence of endometriosis at the site of an episiotomy scar is quite rare. It is often difficult to recognize, which may lead to improper management. However, careful case history and the typical clinical course with local findings usually enable one to make the correct diagnosis. We report our case of perineal endometriosis and present a review of literature. The treatment of choice is complete surgical excision of endometrial tissue and usually obtains permanent cure.

Case:

35-year-old mother of two children presented with complaint of pain and a fluctuating perianal mass for 11 months. 2 years previously, the patient had a traumatic vaginal delivery with a left episiotomy. She noticed a painful mass with an increase in size at the episiotomy site during her menstrual periods. Physical examination revealed a 3 cm, circumscribed and indurate mass located at the left anterior perianal regional the site of the episiotomy. Perineal endometrioma was suspected based on her clinical course and the local appearance of the lesion. MRI appearance in favor of a 31 mm perineal endometriosis nodule (fig. 1). At the time of operation, a 3 cm bluish and relatively superficial mass containing dark blood was found (Fig. 2). The perianal mass was completely excised under general anesthesia (Fig. 3) and the diagnosis of endometrioma was confirmed histologically. Patient has been asymptomatic since the surgery.

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Discussion:

Ectopic sites of endometriosis have been reported in very few cases, including the umbilicus, laparotomy scar, vagina, vulva, appendix, lung, pleural cavity and nasal mucosa [2]. Endometriosis may be defined as the ectopic location of functioning endometrial glands and stroma. It is estimated that pelvic endometriosis is found in 10 to 25 per cent [3]. Schickele, in 1923, was apparently the first to report a case of perineal endometriosis [4] when Ramsey reported another case. Paull and Tedeschi reported 15 cases of endometriosis occurring at the site of an episiotomy scar [5, 6]. A review of the English literature revealed that there have been 66 cases of perineal endometriosis documented since 1923. According to Prince et al [7], in the literature the patients’ ages ranged from 19 to 45 years with an average age of 33. All the patients had at least one successful pregnancy previously and all patients had clearly suffered some type of vaginal trauma [8, 9].

Various theories have been advanced for the pathogenesis of endometriosis; namely, hematogenous or lymphatic spread, coelomic metaplasia, and implantation [10, 11]. The first theory attempts to explain the occurrence of endometriosis by metastatic spread of endometrium at the time of menstruation. The coelomic metaplasiodoctrine postulates that abnormal differentiation of germinal epithelium in the pelvic peritoneum leads to endometriosis because the endometrium is developmentally related to coelomic germinal epithelium [10]. None of these theories have been conclusively proven [11]. Despite these controversies, the implantation theory appears to best explain the pathogenesis of perineal endometriosis. The mucosal lining of the uterine cavity provides a plausible anatomical basis for the implantation theory. The uterine endometrium consists of two zones, the superficial zonal functionalis and the inner zonal basalisis. The zonal functionalis undergoes decidual transformation during the menstrual cycle. The zonal basalisis capable of reconstituting the uterine lining. During menses or parturition, the zonal functionalisis degenerates and is shed along with varying amounts of the zonal basalisis. When the cells from the zonal basalisis are transported to a favourable environment such as a fresh wound from an episiotomy, the cells become attached and develop endometriosis [12]. Perineal endometriosis could be explained by the direct implantation theory in which during vaginal delivery, viable endometrial cells are implanted into the episiotomy wound and subsequent growth occurs. Sometimes the cells disappear spontaneously, but sometimes they grow into endometrioma with a cyclic occurrence which causes.

The clinical painful symptoms of endometriosis may manifest many varied patterns because these foci of endometrium are under hormonal influence [13]. The diagnosis of perineal endometriosis can be made based upon the typical clinical history and local findings. The clinical manifestations of endometriosis are dependent upon the functional activity of the involved tissue. The lesion may present as an asymptomatic mass or in the classic fashion, with a painful mass, this specifically being so during menstruation. Physical examination usually reveals a tender bluish perineal mass. All patients have some type of perineal trauma, either an episiotomy or curettage. The time of onset of the symptoms is varied and has been reported to be as long as 14 years. The variable latent period can be due to the fact that microscopic implants of endometrial tissue requires a certain amount of time before they achieve a sufficient size to produce symptoms. [7, 14].

In ultrasound, she takes the nonspecific aspect of nodules usually hypoechoic and heterogeneous (according to their solid and / or liquid component), sometimes hyperechoic (hemorrhagic forms), with external limits, often blurred and irregular, having a variable shape and size [15]. Compared to transvaginal ultrasound, MR imaging allowed more accurate localization of the nodule the advantage of MR imaging is the accurate evaluation of most extraperitoneal sites of involvement, contents of a pelvic mass and lesions hidden by dense adhesions [16]. Imaging can guide treatment planning and might improve patient management.

The definite histologic diagnosis usually requires two of the three following features: stroma, glands, and hemosiderin pigment, the stroma being the most important element. Microscopically the edematous endometrial stroma with an inflammatory infiltrate is often characteristic. Glands with their endometrial epithelial lining can be demonstrated together with hemosiderin-laden macrophages, which may also frequently be seen. Collections of blood are also often presents as wound-healing progresses [5]. Differential diagnosis includes anal fistula, anal abscess, thrombosed hemorrhoid, sebaceous cyst, dermoid cyst or malignancies. The typical signs and symptoms usually help to make diagnosis and usually found old episiotomy scars [7].

Once the diagnosis is made, the treatment of choice is complete excision of the perineal endometrial tissue [17]. The entire endometrial mass must be removed, recurrence is likely to take place [12]. In doing so, one should take great care not to injure the anal sphincter mechanism, as these lesions are not infrequently intimately associated with...
themuscle. Plastic repairs and reinforcements of the sphincter may be necessary when the lesion is excised, because the sphinctermuscle may be considerably thinned in the area of the excision [18]. Some clinicians have advocated hormonal manipulations using testosterone or medroxyprogesterone based on the fact that endometriomas are multiple and small ones may not be detected at the time of operation or by follow-up studies. Such exogenous hormones may cause necrosis of the decidua and absorption of areas of endometriosis. They stated those probably six months of treatment would destroy any of the imperceptible implants. However, the value of such therapy is not yet proven [12, 14]. Although the medical treatment may achieve symptomatic relief, the perineal mass often persists [12]. Because most of these patients are relatively young and healthy, surgical excision is essential, particularly if one suspects malignancy. Complete surgical removal is the quickest and most effective means of achieving permanent cure.

Conclusion:
Although the pathogenesis of endometriosis is not fully understood, the transplantation of endometrial particles at time of vaginal trauma appears to best explain the occurrence of this condition. Because patients often present with typical history and similar local findings, correct diagnosis can be made. Permanent cure can be achieved with surgical excision.

Conflicts of interest:
None of the authors have any conflicts of interest to declare.

Figure:

**Fig 1:** IRM presence of a lateralised perineal nodule on the left in contact with the lower vaginal walls heterogeneous in all the sequences with areas of hypointense T1 and T2 and hemorrhagic zones in T1 and T2 with spiculated contours in places and large axis 31 mm.
Fig 2:- Presence of a bluish and relatively superficial 3 cm mass containing black blood.

Fig 3:- The perianal mass was completely excised.

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