

Primitive Umbilical Endometriosis in a Young Woman at the District Health Center (CSREF) in Commune II in Bamako

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Abstract

Umbilical endometriosis, also called Villar's nodule, has rarely been described in the literature. It represents only 0.5% to 1% of all cases of endometriosis. We report a case in a 28-year-old nulligest, nulliparous woman who consulted at the CSREF CII in Bamako. The diagnosis was suspected with the presence of umbilical swelling with cyclic, painful, dark hemorrhage of firm consistency. We performed an omphalectomy with an uncomplicated post-operative course. She was released from the hospital three days post-surgery. Anatomico-pathological examination of the resected specimen confirmed the diagnosis of umbilical endometriosis.

Keywords

Umbilical Endometriosis, Young Woman, Bamako, Mali

1. Introduction

Endometriosis is a gynecological affection characterized by the presence of uterine mucosa (endometrial) fragments outside their normal localization [1]. The localizations of endometriosis are in decreasing order of frequency: pelvic (80% - 90%), digestive (5% - 15%), and urinary tract (2% - 4%). The cutaneous localiza-

tion represents only 0.5% to 3.5% and the elective sites are in the scars of laparotomies in particular after hysterectomy. Spontaneous localizations at the level of the umbilicus have been reported in an exceptional way [2]. Umbilical endometriosis also called Villar nodule was very rarely described in the literature in about 0.5% - 1% of endometriosis. It occurs at the level of a surgical scar in previously operated women [3]. Umbilical endometriosis has frequently been described in women who have previously benefited from laparoscopic surgery [4]. The removal by umbilicus of menstruation pain tissues could play a role in the subsequent appearance of umbilical endometriosis [5], although other authors dispute this relationship [6]. It can be the origin of menstruation pain, deep pain in sexual intercourse, digestive transit disorders or infertility. Endometriosis has a history punctuated by the ovarian cycle and is preferentially found at the level of the pelvic peritoneum (superficial endometriosis), sometimes infiltrating the wall of the pelvic organs (deep endometriosis): vagina, bladder, rectum, ureter [6]. We report a case of umbilical endometriosis over a period of four years of activity. Through this case we discussed the diagnostic and therapeutic aspects and did a review of the literature. The patients had given their consent for the case report to be published.

2. Observation

Ms. DC is a 28-year-old nulligest, nulliparous who consulted for umbilical swelling with cyclic hemorrhage of the umbilicus, which gradually increases volume over the last 12 months. She did not have any particular medico-surgical or gynecologist-obstetric history. At the clinical examination, she had a body mass index of 16 and a dark umbilical swelling of four (4) centimeters in diameter with inflammatory signs (**Figure 1**). This umbilical swelling was firm in consistency and painful in palpation. The rest of the exam was normal. The biological analysis and abdominal-pelvic ultrasound were normal. The diagnosis of umbilical endometriosis was suspected. We made an omphalectomy. The post-surgery evolution was simple (**Figure 2**). She was released on day 3 post-surgery. Anatomico-pathological examination of the surgical biopsy confirmed the diagnosis of umbilical endometriosis.



Figure 1. Endometriosis ombilicale primitive.



Figure 2. Post-surgical scar.

3. Discussion

Endometriosis is defined as the presence of functional endometrial tissue outside the uterine cavity [7]. Umbilical endometriosis, also known as Villar nodule, are rare, with a frequency estimated at 0.5% to 1% of all disease locations [8] [9]. We recorded one case over four years of activity. Although umbilical endometriosis often occurs at the level of a surgical scar in previously operated women in particular in laparoscopic surgery, it is less common than postoperative endometriosis [10].

Umbilical endometriosis is said to be primitive if it occurs in women without a history of abdominal-pelvic surgery [11]. Our patient had no surgical history. The etiopathogenicity of endometriosis is currently still unclear. Four pathogenic theories were issued to explain different parietal localizations of this disease. First, the metastatic theory of Ivanov and Meyer: Under the influence of infectious, hormonal, toxic and traumatic factors, cells derived from the coelomic epithelium retain their embryonic skills and undergo metaplasia in endometrial cells. Second, Sampson's reflux theory corresponds to a migration of endometrial shreds by periodic tubal regurgitation of menstrual blood or surgical contamination and their ectopic implantation. Third, the metastatic theory of Alban tries to explain the extra-genital localization by a venous or lymphatic migration of the endometrial cells which will be grafted elective on scar obstacles or at the level of relay Ganglion particularly on the lymphatic network of the umbilicus. Finally, the mixed theory of Lavender concludes that menstrual regurgitations would induce the metaplasia of cells in the coelomic epithelium into endometrial cells. None of these theories alone could, however, explain the different ectopic localization of endometriosis [12]. In the case of symptomatology, a constant painful syndrome, localized and exacerbated during menstruation, is present in most cases [12]. Our patient complained of permanent umbilical pain accentuated at the time of menstruation. The swelling sits in the folds of the umbilicus

itself or at its peri-umbilical periphery with thrust phases and of remission [12]. In our case, the swelling was umbilical with thrust phases during the rules. The size of the swelling varies from 0.5 to 5 cm with peri-lesional sclerosis [12]. The patient had a 4-cm diameter swelling. It is a superficial swelling of a characteristic dark red or bluish color, which can sometimes be ulcerated to dull a chocolate tetr, or even bright red blood liquid [11]. Our patient had a dark-colored umbilical swelling. In our case, the diagnosis of umbilical endometriosis was suspected before the catamenial character of the bleeding of the umbilical swelling. The completion of a biopsy is easy and can guide the diagnosis by highlighting a glandular epithelium surrounded by an endometrial stroma. Abdomino-pelvic MRI may assist in the diagnosis of umbilical endometriosis by a homogeneous, hyper-intense cystic lesion in T1 sequence [10]. Abdomino-pelvic ultrasound was normal. The differential diagnosis of the primitive umbilical endometriosis is done with an umbilical hernia, pyogenic granuloma, hemangioma, and a melanoma. However, it is mainly from an umbilical metastasis of an abdominal-pelvic tumor called Sister Marie-Joseph's nodule that this diagnosis must be differentiated [13]. Our treatment of choice was surgical resection. The wide surgical resection is the treatment of choice because of its resemblance with a primary or metastatic tumor [14]. Medical treatment based on danazol or LHRH like medications prior to the surgery would decrease the size of the painful menstruation nodule [13].

4. Conclusion

Primitive umbilical endometriosis is a rare condition. Its pathophysiology is still poorly elucidated. The diagnosis is evoked in the presence of a black umbilical swelling in a dark skin patient, painful with cyclic bleeding without a history of surgery. The treatment consists of a wide surgical resection to prevent recurrences. Histology confirms the diagnosis.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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