

Primary Umbilicus Endometriosis in Burkina Faso

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Abstract

Umbilical location of endometriosis is rare. We report the clinical history and the care of three women without a history of abdominal surgery, aged respectively 32, 39 and 40 years who presented a primitive umbilical endometriosis. Symptomatology made essentially a painful swelling and bleeding umbilical occasionally or during menstruation had allowed to suspect the diagnosis. Treatment consisted in a wide excision of the umbilicus. Pathological examination of the surgical specimen confirmed the diagnosis in all three patients. The evolution was marked by a single disappearance of painful symptoms and no recurrence with a 10-month decline for two patients and 12 months for one patient.

Keywords

primary endometriosis; umbilicus; surgery; Burkina Faso

Introduction

Endometriosis is a anomaly location of myometrial tissue having both endometrial glands and stroma. The prevalence of the disease in the general population is about 5 to 10% [1]. Skin involvement is only 0.5 to 3.5% and electively seat in the scars of gynecological obstetric interventions [2]. Spontaneous location at the umbilicus is exceptional, its pathogenesis is also discussed and the diagnosis is difficult without the contribution of pathology [2,3,4]. We report three cases of spontaneous umbilical endometriosis diagnosed and treated surgically.

Case Presentation

Observation n°1

Mrs. A T, aged 32, was seen in general surgery consultation in January 2013 for a painful umbilical mass. This mass existed for 4 months and gradually increased volume. She reported an illegal abortion and never had an abdominal surgery. Physical examination revealed a patient in good general condition, a firm umbilical mass, about 3 cm of diameter, painful on palpation and movable relative to the deep plane. The rest of the examination was normal. The umbilical endometriosis diagnosis was suspected. An abdominal and pelvic ultrasound had found an echogenic umbilical mass, with a tissue appearance. A wide excision of the umbilicus was performed. Histological examination of the surgical specimen had confirmed the endometriosis with endometrial glands surrounded by stroma. The postoperative course was uneventful with pain relief without recurrence after 10 months.

Observation n°2

Mrs. A Z, aged 39, was seen in general surgery consultation in January 2015 for a painful umbilical swelling that gradually increased in size since 4 months. These signs were punctuated by the menstrual cycle. In her history, there were a clandestine abortion in 2006. She reported no history of abdominal or pelvic surgery. The clinical examination revealed a large, multinodular and firm umbilical swelling, with a diameter of 4 cm (Figure 1). This mass was slightly painful on palpation and movable relative to the deep plane. The diagnosis of spontaneous umbilical endometriosis was suspected. Laparoscopic exploration of the pelvic and abdominal cavity did not find other location of endometriosis. Wide excision of the umbilicus was performed, and histological analysis of the surgical specimen confirmed umbilical endometriosis. The postoperative course was uneventful. The patient was followed for 10 months and no recurrence was noted.

Observation n°3

Mrs. V S, aged 40, was received in general surgery consultation in July 2015 for a painful umbilical swelling. She noted 4 pregnancies with 4 vaginal deliveries and she had never had abdominal and pelvic surgery. This swelling evolved since about ten months, was gradually increase volume and bleeding occasionally. The bleeding was punctuated by the menstrual cycle. Physical examination revealed a patient in good condition with a multinodular umbilical swelling, about two centimeters in diameter, hyperchromic, painful on palpation and movable relative to the deep plane. Umbilical endometriosis diagnosis was suspected. Surgical wide resection of umbilicus was performed. The postoperative course was uneventful. Histological analysis of the surgical specimen confirmed the umbilical endometriosis showing endometrial glands vary in size surrounded by a cytogenic stroma (Figure 2). The patient was followed regularly in consultation with recurrence-free at 12 months.

Discussion

The locations of endometriosis are usually pelvic. Other locations are possible, particularly of the skin. The umbilical location is rare and its frequency would be about 0.5 to 1% of all localizations of the disease [4]. It is most commonly seen in women of childbearing age with a maximum between 30 and 40 years [3,5,6], as is the case with all our patients. It seems rare before 20 years [3]. Endometriosis is primary if it occurs in women with no history of abdominal or pelvic surgery, otherwise it is called secondary [4,5,7]. In these cases, there would be at the time of surgery, transplantation of endometrial tissue at the surgical wound. The signs of the disease appear then after a period varying from 1 to 13 years [5,7]. However, there is still no consensus on the mechanism of primary umbilical locations. According to some authors, endometrial cells from the peritoneal cavity migrate toward the umbilicus through the blood or lymph vessels [3,4]. Other authors argue, for cons, the primary umbilical endometriosis may be due to metaplasia of embryonic pluripotent coelomic cells [6,8,9].

The typical clinical form of umbilical endometriosis is a firm mass, painful to palpation, which had variable volume according to menses and produces a sero-hematic liquid. Lesional perished sclerosis may underestimate its size. The bloody discharge seems less frequent. This symptomatology having a cyclical coincident with menses is fundamental and sometimes enough to suggest the diagnosis from clinical examination [3]. In our cases, the cyclical nature of the pain associated with umbilical bleeding motivated

the consultation and allowed to suspect the diagnosis. In fact, this cyclical pattern is found in only about half of the cases and is rarely complete [3]. It is common to find a genital or pelvic lesion associated [1,3]. In one of our cases, the search for these locations by laparoscopy was futile. For most authors, the laparoscopy should not be systematic and should be indicated when there are symptoms suggestive [1,3]. According to Chandoul A et al., The frequency of the association between endometriosis and infertility is estimated at between 30 to 40% [3]. In addition, combination with psychological disorders such as depression and anxiety was reported by AS Laganà et al. [10]. These mood disorders were absent in our patients.

In the diagnosis, confusion is possible with malignant umbilical tumors and abnormalities omphalomésentérique channel or urachus. Anyway, the biopsy or the resection with pathological examination is always needed to confirm the diagnosis as in our series.

At the macroscopic level, the umbilical endometriosis presents as a nodular or cystic tumor, bluish, poorly defined, whose cut leaves flow a chocolate-colored liquid or blood. Sometimes it is provided in the form of a small tumor, surrounded by an intense sclerosis without cleavage plane.

Regarding histology, this abnormal tissue gives an appearance similar to that of the ectopic endometrium showing endometrial glands lined by a cylindrical epithelium and endometrial stroma, made of small round cells with an extensive vascular system. Smooth muscle fibers are inconstant and perifocal sclerosis is a nonspecific but constant element [3,4]. However in 30% of cases, despite a macroscopic appearance, histological evidence is lacking [6].

Treatment of umbilical endometriosis is either medical or surgical. Medical treatment consists to administrate an hormone (synthetic decapeptide analogous of gonadorelin). This treatment is discussed, due to the small amount of hormone receptors in the tumor and lesional perished sclerosis creating an independent circulation [2,4]. Surgical treatment is the most effective gesture, given the accessibility of the tumor resection. It consists of a omphalectomie followed by an umbilical plasty [3,4,6,8]. The management in our cases was essentially surgical. Besides these two therapeutic methods, CO2 laser photocoagulation has been reported by some authors. It seems to be effective but unfortunately with little widespread use [11].

Ongoing research may find news ways for medical treatment. These include a study that reported the regression of endometrial lesions in mice in the negative regulation of cell proliferation [12]. Cutaneous recurrence after surgical treatment is estimated at 11% [6], often appearing during the year following the intervention [1,6]. In our cases no recurrence was noted after 10-month in two patients and 12 months in the third patient.

Conclusion

Spontaneous umbilical endometriosis is an exceptional location of the endometriosis disease. The cyclical nature of the symptoms should suggest the diagnosis. Confirmation is made by histological examination. Search for other locations, in particular abdominal, is important. Surgical resection remains the treatment of choice.

Figures



Figure 1: Multinodular umbilical tumor

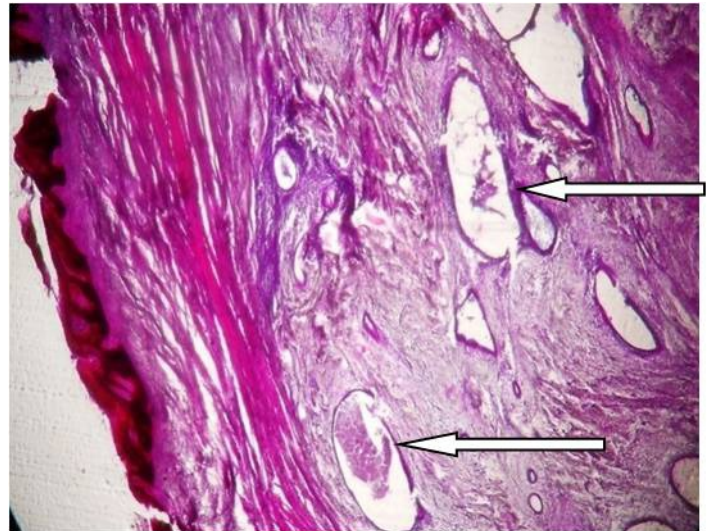


Figure 2: histological section of the specimen showing endometrial glands (arrows) surrounded by a cytotrophoblastic reaction.

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Manuscript Information: Received: August 23, 2016; Accepted: December 21, 2016; Published: December 22, 2016

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Citation: Bonkougou GP, Sanon BG, Bénao BL, Zaré C, Belemilga H, Sanou A, et al. Primary umbilicus endometriosis in Burkina Faso. *Open J Clin Med Case Rep.* 2016; 1202

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