Case Report

Umbilical Endometriosis

Umbilical Endometriosis: A Case Study

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ABSTRACT

Background: Umbilical endometriosis is a rare form of extrapelvic endometriosis characterized by the presence of functional endometrial tissue within the umbilical region.

Case Presentation: We report the case of a 29-year-old Sudanese nulliparous woman who presented with a two-year history of cyclical dull umbilical pain associated with deep red discharge, worsening during menstruation. She also reported dyspareunia and primary infertility. There was no history of abdominal surgery or trauma. Physical examination revealed a 2 cm bluish, firm, tender, and irreducible umbilical nodule. Ultrasonography demonstrated a superficial avascular hypoechoic mass suggestive of umbilical endometriosis. **Conclusion:** Umbilical endometriosis should be considered in women of reproductive age presenting with cyclical umbilical pain and bleeding, even in the absence of prior surgical history.

Key Words: Umbilical endometriosis, Villar's nodule, Extrapelvic endometriosis, GnRH therapy

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INTRODUCTION

Endometriosis is a long-term gynaecological disorder that is typified by the presence of functional endometrial glands and stroma located outside the uterine cavity. It usually involves the structures of the pelvis, including the ovaries, uterosacral ligaments and peritoneum, and is often referred to as being the cause of dysmenorrhea, chronic pelvic pain, and infertility[1,2]. Endometrial tissue will most commonly proliferate on or around the reproductive organs like the ovaries and fallopian tubes, on the external environment of the womb, or on the tissues surrounding the womb and the ovaries. It may also develop on other organs within the pelvic area such as the bowels, stomach, bladder or cervix. It is also a frequent occurrence in other parts of the body, rarely[3]. It is DM's complication called Diabetic Nephropathy that all extra genital endometriosis cases are associated with, and is extraordinarily uncommon[4]. 6-10% of women of reproductive age is the approximate number of the global incidence of endometriosis, and most likely underdiagnosed[5]. Endometrial cells may proliferate via lymphatic or venous pathways and implant in other locations, such as the umbilicus, lungs, and pleura[6].

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CASE REPORT

A 29-year-old Sudanese woman, married for four years, presented with a two-year history of cyclical, dull aching pain localized to the umbilical region, associated with deep red discharge from the umbilicus. The pain characteristically intensified during menstruation and was partially relieved with combined hormonal contraceptives and analgesics. She was nulliparous and had been attempting to conceive throughout the duration of her marriage. There was no history of previous abdominal surgery, trauma, or laparoscopic procedures. She also reported dyspareunia. On physical examination, her vital signs were stable, with normal pulse rate, blood pressure, and temperature. Abdominal and pelvic examinations were unremarkable except for a 2 cm bluish nodular lesion at the umbilicus. The lesion was firm, irreducible, and tender on palpation. The cyclical nature of pain and bleeding, along with the history of infertility and dyspareunia, raised a strong clinical suspicion of endometriosis. Ultrasonography of the umbilical region demonstrated a superficial, avascular, irregular hypoechoic mass with posterior acoustic shadowing, findings consistent with umbilical endometriosis. However, a definitive diagnosis could not be established based on imaging alone. Magnetic resonance imaging (MRI) was not available at the time of evaluation. In view of the high clinical suspicion, the patient was started on a two-month trial of gonadotropin-releasing hormone (GnRH) analogues, considering their established efficacy in the management of pelvic endometriosis. The patient showed an excellent clinical response, with marked reduction in pelvic pain and noticeable decrease in the size of the umbilical mass. Following the favorable response to medical therapy, surgical excision was

planned. The patient underwent surgery under general anesthesia. A supra-umbilical incision was made, and careful dissection was carried out. A 2.5 cm mass was excised along with a margin of normal surrounding umbilical tissue to ensure complete removal. The specimen was sent for histopathological examination. Histopathology revealed fibro-adipose and connective tissue containing endometrial glands and stroma, thereby confirming the diagnosis of primary umbilical endometriosis.

DISCUSSION

Umbilical endometriosis is a rare type of extrapelvic endometriosis, which has a small percentage of the cases of abdominal wall endometriosis. It can be either primary (spontaneous) disease, which has not been preceded by any previous surgery, or secondary endometriosis, which appears after abdominal or pelvic operations. Here, there is no history of surgery or trauma, which helps in identifying the diagnosis of primary umbilical endometriosis, also known as Villar nodule[7]. The aetiology of primary lesions is not fully understood, and it has been postulated that the disease is either lymphatic or hematogenous, or may involve metaplastic differentiation of embryonic elements in the umbilical area. Skin manifestation in endometriosis is very rare with only up to 0.5-1 being reported in various studies. It affects 15% of women in their active sexual life, i.e. between the ages of 20 and 40 years of age, whereas 5% of cases have been found in women who are post menopausal. Endometriosis is typically present in the ovary, uterus, as well as the peritoneum and vagina[8]. Extragenital endometriosis has numerous theories to explain its occurrence. The lesions can be single or multiple findings and can be located across a broad anatomical distribution. It is common to face diagnostic challenges, as patients often display uncharacteristic or unanticipated symptoms[9].

CONCLUSION

Umbilical endometriosis is a rare but important differential diagnosis in women of reproductive age presenting with cyclical umbilical pain and bleeding. The absence of prior abdominal surgery does not exclude the diagnosis, as primary umbilical endometriosis can occur spontaneously. Clinical suspicion based on cyclical symptoms is crucial, while histopathological examination remains the gold standard for confirmation.

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