

# Endometriosis Graft on Umbilical Scar

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**Abstract:** Umbilical endometriosis accounts for 0.5%-1% of all extrapelvic endometriosis. It is usually secondary to surgery involving the umbilicus; primary nodules “Villar’s nodule” are very rare. We report a case report of endometriosis graft on umbilical scar secondary to open surgery. A 41-year-old healthy parous patient with past history: cesarean of the last child birth 6 years ago. § three years after, she was operated for linea alba hernia. One year after, she presented with a swelling painful umbilicus nodule, recently, which gradually has been evolving and associated with cyclical umbilical pain. Clinical examination at admission: umbilicus nodule 12mm, painful to the touch, irreducible, which could not be reduced by gentle digital pressure. Ultrasound and CT (computerized tomography) scan: parietal tissue mass of 12mm/8mm without intraperitoneal continuity. The surgical treatment consisted of wide local nodule excision. The histopathological examination confirmed the diagnosis. The patient was referred for further investigation to gynecology department where she underwent a hysterectomy for uterine adenomyosis.

**Keywords:** Incisional site, endometriosis, reproductive age, cutaneous endometriosis, cyclic pain.

## 1. Background

Endometriosis is characterized by the presence of ectopic endometrium. An uncommon form is extrapelvic, the most affected sites are: the urinary tract, gastrointestinal tract, thorax, abdominal wall and surgical scars. Umbilical endometriosis accounts for 0.5%-1% of all extrapelvic endometriosis which have nonspecific and varied symptoms while the frequently reported symptoms in the pelvic endometriosis are: dysmenorrhea, deep dyspareunia, dyschezia, dysuria and the infertility. The diagnosis is sometimes difficult with varying signs and several differential diagnoses. The final word is the histopathological study results.

## 2. Case Report

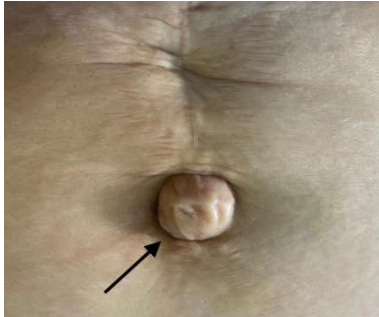
Herein, we report a case of a 41-year-old healthy parous patient with past surgical history: cesarean of the last child birth 6 years ago and she was operated for linea alba hernia (3 years ago).

One year after, she presented with a swelling painful umbilicus nodule (Fig. 1). Recently, which gradually has been evolving and associated with cyclical umbilical pain. Clinical examination at admission: umbilicus nodule 12mm, painful to the touch, irreducible, which could not be reduced by gentle digital pressure. Ultrasound and CT (computerized tomography) scan (Figs. 2a and 2b): parietal tissue mass of 12mm/8mm without intraperitoneal continuity. The surgical exploration of the umbilicus was performed. Under general anaesthesia, a periumbilical incision was made. To our surprise, a subcutaneous, lobulated mass was exposed, which was fixated on the bottom of the umbilicus. The abdominal wall itself was unaffected. The nodule was excised, and histopathological examination revealed connective tissue fragments with irregular tubular formations surrounded by stromal cells. Our patient was treated by excision of the swelling. Two months after the surgery, she reported complete recovery of the painful sensation and swelling in the umbilicus. The histopathological examination confirmed the diagnosis. The patient was referred for further investigation to gynecology

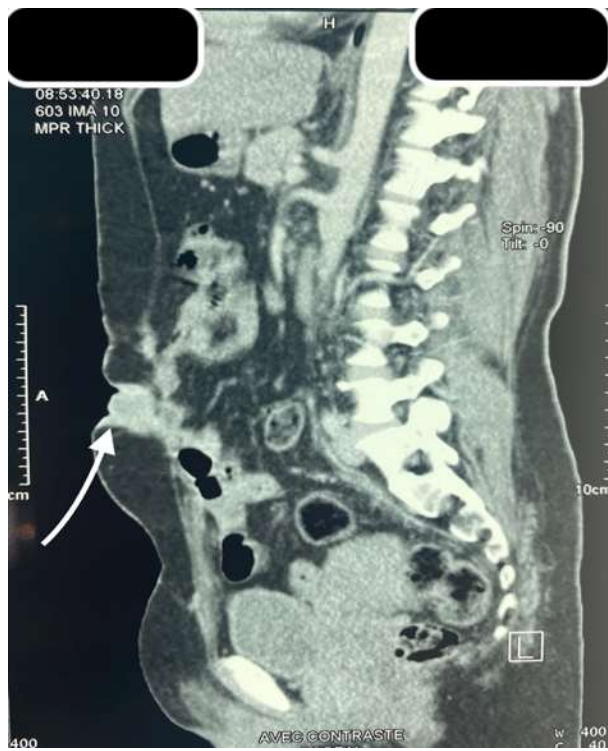
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department where she underwent a hysterectomy for uterinadenomyosis.



**Fig.1**Clinical presentation umbilicus nodule(black arrow), irreducible, which could not be reduced by gentle digital pressure.



(a)



(b)

**Fig. 2(a-b)** Parietal tissue mass of 12mm/8mm without intraperitoneal continuity (white arrow).

### 3. Discussion

Umbilical endometriosis scars are a rare disorder. Villar [1] in 1886 reported the first case of umbilical endometriosis. And it can be caused by surgical intervention. Several studies have been put to explain pathogenesis. The hypothesis of migration theory by Sampson explains ovarian endometriosis while coelomic induction theory explains peritoneal endometriosis. Diminished natural killer cell immunity lessens the clearance of endometrial cells from peritoneum. Scar endometriosis is explained by the migratory pathogenesis theory wherein the endometrial tissue is dispersed by vascular and lymphatic channels due to surgical manipulation. Other theories are mainly based on mullerian remnants undergoing metaplasia to endometriosis [2, 3]. It is always the coexistence of pelvic endometriosis causing pelvic pain [5]. Clinical diagnosis is sometimes difficult, there are many differential diagnosis which are difficult to make only on functional or physical signs. It depends on the anatomic locations of the disease. Pietro Valerio foti [8] has reported several extra pelvic endometriosis symptoms: dysuria, gross hematuria during menses, irritative voiding symptoms, urgency, frequent urination, urinary storage symptoms, tenesmus, burning sensation, suprapubic discomfort and pain, urinary incontinence [6], dysmenorrhea, dyspareunia, urinary symptoms, hydronephrosis, flank pain, nonspecific pelvic pain, dyspareunia, dysmenorrhea, dyspareunia, postcoital spotting, prolonged menstruation not responding to medical therapy leading to anaemia, cyclic pain during defecation, dyschezia, cyclic hematochezia, bowel cramping, catamenialdiarrhoea, pencil-like stools, bowel obstruction. When unusual locations outside the pelvis occur, the pain may be site specific. Thoracic-diaphragmatic endometriosis: chest pain (diffuse or basithoracic), pneumothorax, dyspnea,

hemoptysis. & Sciatic nerve: cyclic sciatica, back pain, gluteal pain radiating to the dorsal thigh and lateral lower leg, positive Lasègue's sign, sensory loss, reflex alterations, muscle weakness, paresis [7]. The treatment is based on surgery. The histopathology is done to rule out malignancy and to confirm the diagnosis [4].

#### 4. Conclusion

Endometriosis is an underdiagnosed disease, associated with poor quality of life. So, it is important to include it in the differential diagnosis of umbilical nodule, especially if it appears in a previous scar of laparoscopy or laparotomy.

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