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PRIMARY UMBILICAL ENDOMETRIOSIS – CASE REPORT

Dr. Harshita Jain[1] (Junior Resident 3rd Year) & Dr. Prof Shazi Qureshi[2]
(Head of Unit and Professor)

Sri Aurobindo Institute of Medical Sciences and PGI, Sri Aurobindo University, Indore, M.P.[1&2]

Corresponding Author: Dr. Harshita Jain

Abstract

Extra-pelvic endometriosis is considered less common out of which umbilical endometriosis is a very rare condition (0.5%-1%)(1,3).It commonly develops secondary to surgical scars, but in few cases like this case it may present as spontaneous or primary umbilical endometriosis(4).

The diagnosis of umbilical endometriosis can be mistaken for a cyst, abscess, melanoma, lipoma, suture granuloma or a deposit of systemic malignancy.(6,7)

Endometriosis should be suspected in all presenting with umbilical swelling, discharge, pain and cyclical bleeding from the umbilicus. Surgical resection and repair is the preferred treatment options for umbilical endometriosis

In this case report, both clinical presentation and imaging suggested that the patient had primary umbilical endometriosis.

No other concomitant site of endometriosis was found in this patient. Primary umbilical endometriosis is a rare medical condition and it's diagnosis becomes challenging. An astute judgment and clinical diagnosis is therefore required for managing such cases.

1. Introduction

Endometriosis is a chronic, debilitating gynaecological disease that affects 15% of all women in their reproductive age. It is characterised by development and presence of endometrial glands and stroma in anatomical positions and organs outside of the uterine cavity. **Pelvic endometriosis** is commonly seen in ovaries, pouch of douglas ,uterosacral ligaments , pelvic peritoneum etc which generally leads to menorrhagia, dysmenorrhea, infertility and chronic pelvic pain(5). Extragenital or extra-pelvic endometriosis is considered less common; however, it has been observed in various parts of the female body like bladder, bowel, brain, lungs, umbilicus, surgical scars. Among which **umbilical endometriosis is a very rare condition (0.5%-1%)** (1,2).It commonly develops secondary to surgical scars, but in few cases it may present as spontaneous or primary umbilical endometriosis. This case that was presented before us was one of the very few that had spontaneous umbilical endometriosis.

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Case Report

A 46 year old female , multiparous married for 25 years presented in our out patient department with complaints of abdominal fullness since 6-8 months , heavy menstrual bleeding since 1 year that was associated with bleeding from umbilicus during menses which was first noticed 8 months back. This was patients first visit to a hospital with these chief complaints. She has no history of any chronic illness and her surgical history was unremarkable. She has no history of any accidents, scarring etc. Her menstrual cycles were regular i.e 30-32 days cycle , denied any complaints of denied umbilical pain, dyspareunia, infertility and any past history of endometriosis. However during her menses she had complaints of heavy menstrual bleeding associated with dysmenorrhea, passage of clots and bleeding from umbilicus on and off during menses.she was admitted for further evaluation. Upon physical examination following were her per abdomen finding. She had marked obesity, umbilicus was everted and centrally placed, Firm to hard, immobile and hyperpigmented mass of about 5x4 cm felt beneath the umbilicus , Uterus of 20-22 week size ,non tender, slight restricted mobility side to side with firm to hard in consistency with regular margins and absence of ascites. Following per abdomen examination we proceeded with per vaginum examination and following were the findings A multilobulated mass of about 22 week size arising from the pelvis reaching just below the umbilicus.The mass was non tender , firm to hard in consistency , irregular margins with slightly restricted mobility in the abdomen .The uterus could not be felt separate from the mass as it was moving with cervical motion. Bilateral fornices were full , non tender .Cystic mass of approximately 3x4cm felt on left side separate from uterus .

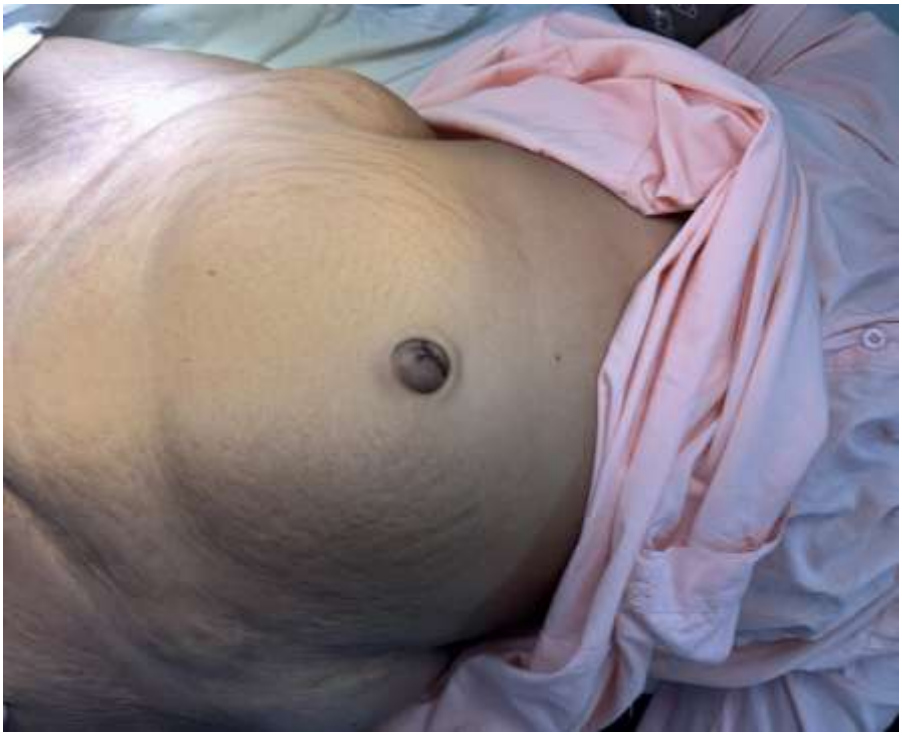

Figure 1: Per abdomen of the patient , umbilical nodule seen as described.

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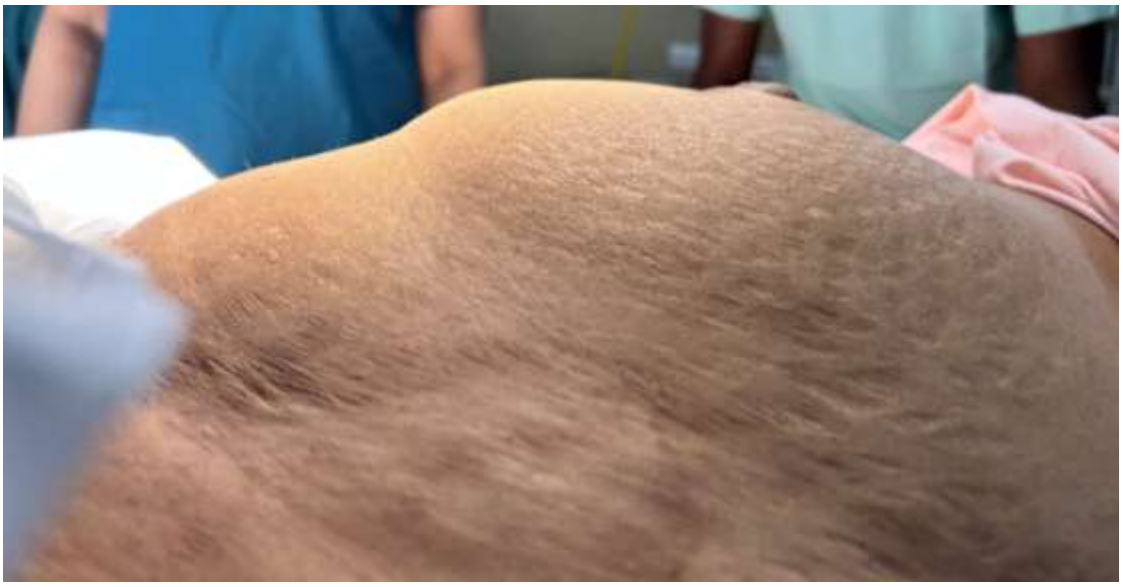

Figure 2 lateral view of the patients abdomen.

After brief examination we went for radiological confirmation for our findings.
We did ultrasongraphy and CECT abdomen.

Usg:
Well defined echogenic umbilical mass avascular 5.6x10.2x2,7 (82 cc)
UTERUS-A\V- 5.6X10.2x2.7 =354 cc
Left ovarian hemorrhagic cyst seen
ET 11 mm
Sub serosal fibroid in posterior myometrium - 6.9x7.5x5.6 cm =155 cc
And Uterine fibroid on fundus - 5.8x7x8.1 cm =173 cc seen

CECT finding: There is e/o smoothly marginated moderately enhancing predominantly solid soft tissue mass lesion , seen possibly arising from the left anterosuperior wall of the fundus of uterus- may represent subserosal fibroid. It measures about 9.6 x 9.8 x 9.6 cm (AP x TR X CC). Pedicle of this lesion reveals intensely enhancing tortuous vessels, concerning for torsion / Detorsion. There is another similar morphology mildly enhancing soft tissue mass lesion arising from the posterior myometrium of the body of the uterus–likely fibroid. It measures 8.1 x 7 x 7 cm and it is compressing on the adjacent mid rectum with preserved fat planes.Rest of the uterus is otherwise normal.Bilateral ovaries are visualized separately .Right ovary- 2.5 x 2.4 cm, left ovary– 3.2 x 2.1 cm.Small Umbilical mass (?hernia) with defect of 8 mm noted with omental fat and smoothly marginated soft tissue lesion of size 3.3 x 4 cm seen

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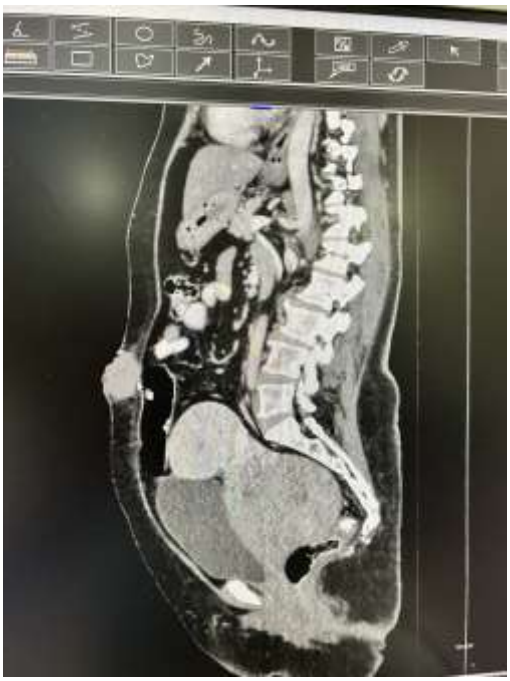

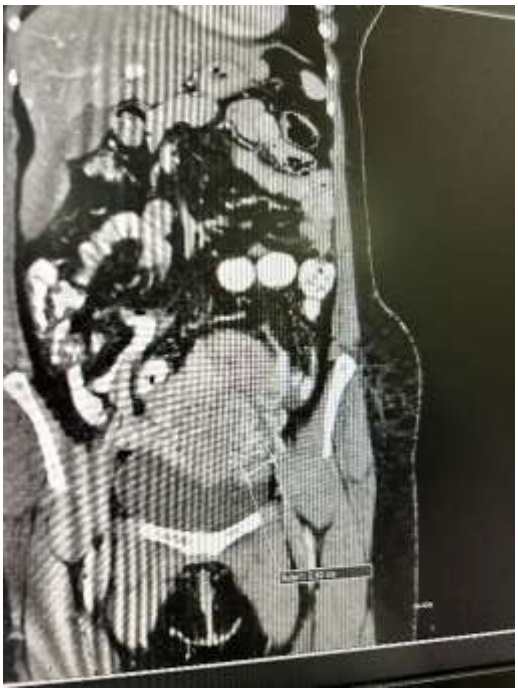

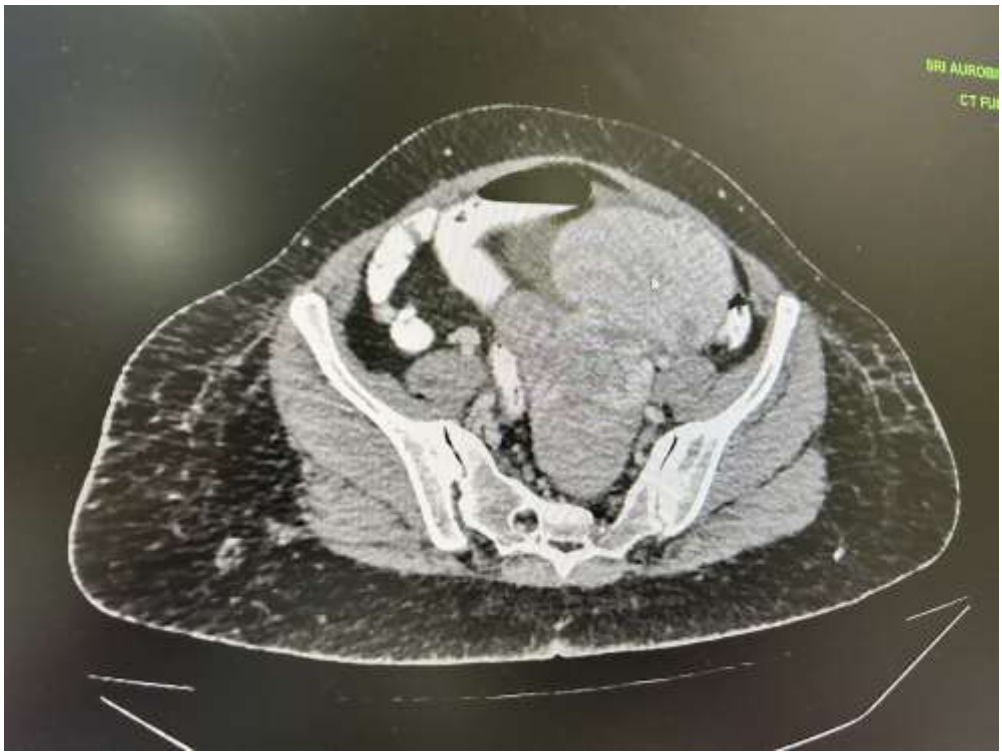

Figure 3, 4, 5: Cect imaging of umbilical nodule, uterus and fibroid.

In view of cyclical bleeding from the umbilicus, there was suspicion of primary umbilical endometriosis. Hence USG guided umbilical biopsy was planned.

Following are the results of the biopsy:

HISTOPATHOLOGY: Tissue from umbilical mass

MACROSCOPIC: Multiple gray-white soft tissue strips ranging from 0.3 to 1 cm in length. All tissue processed.

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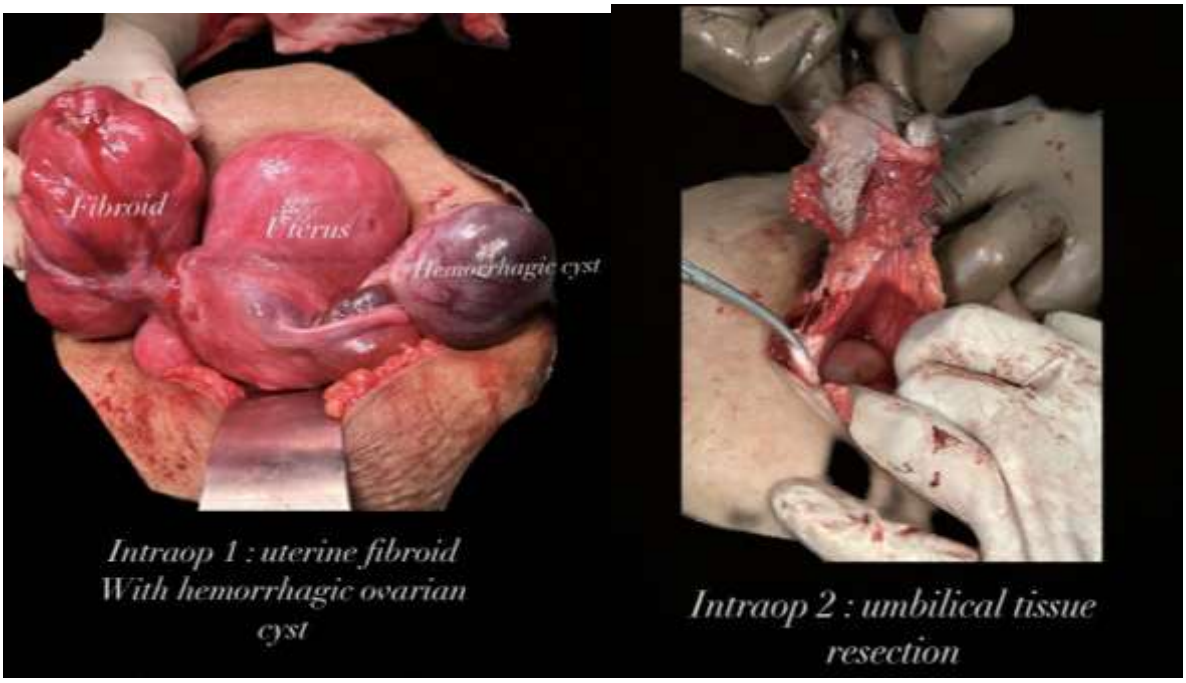
MICROSCOPIC: The sections show bits of fibrocollagenous tissue with endometrial stroma of normal morphology. Few endometrial glands seen.
IMPRESSION: The features are suggestive of Endometriosis.

After confirmation of all our findings based on physical, radilogocial and histological we planned to perform Total abdominal hysterectomy with B/L salpingo-opherectomy (by Pfannenstiel incision) and Omphalectomy : resection of umbilical endometriotic granuloma and repair –(by transverse incision). During the operation, a separate transverse incision was created around the umbilicus and the wound was deepened down to the abdominal wall fascia by using electro-cautery. The umbilicus was later reversed and a purple endometrial tissue was observed implanted at its base. After that, an incision was created to encompass the involved skin and the specimen (including skin, subcutaneous tissue, rectus sheath and endometrioma) was pulled over .Local wide excision of the endometriotic lesion was done obtaining an adequate rim of normal tissue all around , in order to avoid local recurrence. The patient underwent the surgical operation successfully.

INTRAOPERATIVE

- **Uterus with multiple large fibroids were seen**
- **Pediculated sub serosal fibroid of 10x12 cm arising from right fundal region**
- **Posterior wall intramural fibroid of 8x10 cm**
- **Left lateral wall fibroid of 2x2 cm**
- **Large hemorrhagic ovarian cyst 6x6 cm (left side) , right ovary grossly normal**
- **Umbilical endometriotic granuloma of 4x5 cm**



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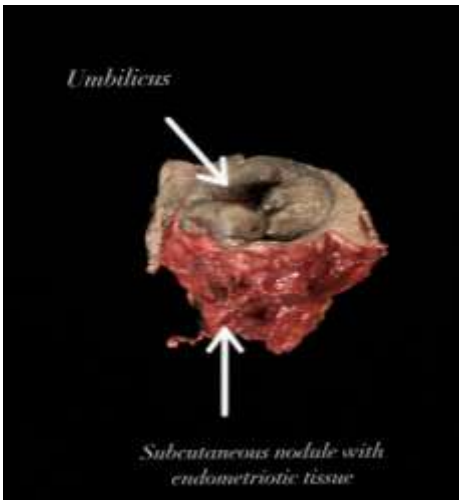

Post operatively, Patient was given iv antibiotics, analgesic and symptomatic supportive care.
Post-operative period was uneventful and patient was discharged on day 5
Mattress suture were removed on post op day 10. The Histopathological report confirmed umbilical endometriosis.

2. Discussion:

Primary umbilical endometriosis is a rare medical condition and if it is associated with an underlying hernia, its diagnosis becomes challenging.
The diagnosis of umbilical endometriosis can be mistaken for a cyst, abscess, melanoma, lipoma, suture granuloma or a deposit of systemic malignancy.(6,7)
Endometriosis should be suspected in all premenopausal females presenting with umbilical swelling, discharge, pain and cyclical bleeding from the umbilicus
Many of these patients may have concomitant pelvic endometriosis.
Surgical resection and repair is the preferred treatment options for umbilical endometriosis.(8)
Additionally, hormonal therapy like **Dinogest**, GnRH analogues or danazol can be used in severe cases.
During surgical resection, spillage should be avoided to prevent disease recurrence(9,10). Also, superficial therapies, such as thermocoagulation, are not recommended as it can predispose the patient to disease relapse
In this case report, both clinical presentation and imaging suggested that the patient had an umbilical mass which on HPE was suggestive of primary umbilical endometriosis.
No other concomitant site of endometriosis was found though the patient was found to have multiple large uterine fibroids which was concurrently treated surgically.
Dinogest was started postoperatively (to reduce any residual disease)
As a follow-up plan, the patient was informed about the risk of recurrence for endometriosis. She was advised to maintain a high-fiber diet and to avoid heavy weight lifting and any other strenuous activity for at least four to six weeks after the surgery

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