Introduction

Endometriosis defined as the presence of endometrial glands and stroma outside the uterus. It is a common gynecological condition that affects up to 22% of women of reproductive age and represents an important cause of infertility.[1][2] Common locations of pelvic endometriosis like ovaries, fallopian tubes, uterosacral ligaments, the rectovaginal septum and the pelvic peritoneum.

Extra pelvic locations of endometriosis have been seen in gastro-intestinal, skin, diaphragm, lung and even brain.[3] Endometriosis of umbilicus is also known as Villar’s nodule, is a very rare entity. It can occur following laparoscopic or other surgical procedures involving the umbilicus. Clinical manifestation include umbilical pain with bleeding from the umbilicus during menstruation with small nodule.[4][5]

Case report

A 38ys p2L2, non tubectomized lady came to our hospital with complaints of swelling at umbilicus since 2 yrs with bleeding from the umbilicus during menstruation since 2 yrs. Her menstrual cycle normal with 3-4 days/30 days with no complaints and last cycle was 2 sept 2014. Her last delivery was 8 yrs back and both deliveries were by C section.

Past and Family History were normal with no habits in personal history. On local abdominal examination showed vertical scar extending from supra pubic region approximately 8-10cm, but upper end of the scar was 5cm away from umbilical swelling (fig-1&2).

Fig 1

The swelling was dark in color, firm in consistency with diameter about 5x6cm with well defined rounded borders with smooth surface. It was non mobile with mild tenderness and non reducible on palpation. Local External and internal genitalia examination were normal. The differential diagnoses were umbilical endometriosis, Lipoma, Hernia and Sister Joseph’s nodule. Her sonography showed hypoechoic lesion of 5.2x6.1cm which was confined to anterior abdominal wall. No evidence of pelvic endometriosis was seen. CT scan showed dense adhesion from peritoneum to abdominal wall. Fine needle aspiration cytology was done and which showed Umbilical Endometriosis.

The patient opted surgical management, so excision was planned. During the operation, the mass was found to be approximately 5-6 mm below the skin surface and was excised with a healthy margin and it was superficial to the rectus sheath (fig-3).

Fig 3. Surgical excision of the lesion
Histopathological features showed glands with stroma, which confirmed the diagnosis. [fig4]

Fig 4. Low (A) and high power (B) – Showing endometrial glands with Stroma

The risk of recurrence and scar endometriosis were explained to the patient. She was followed up to four months after surgery she was asymptomatic.

Discussion

Primary (spontaneous) Umbilical endometriosis was first described by Villar in 1886 and represents about 0.5-1% of all cases of extragenital endometriosis [6-8]. Endometriosis involving the abdominal wall is termed as Cutaneous endometriosis and is commonly associated with surgical scars. Endometriosis is a benign pathology of women of fertile age with highest incidence between 30-40 yrs. The pathogenesis of Umbilical Endometriosis is not well understood. A number of theories have been put forward to explain its development. In this regard, different hypothesis have been proposed, such as the embrional rest theory of Wolffian or Mullerian remnants, the transplantation theory in which the ectopic endometrial tissue harbors from retrograde menstruation or haematogenous/lymphatic dissemination, or a combination of them. No single theory can explain the spontaneous occurrence of endometriosis in all affected site. [9]

Umbilical endometriosis is rare, but may appear during active menstrual life, as a small, bluish pink mass in umbilical region with varying diameter from 1-5cm. This mass may cause pain, swelling or tenderness mainly during premenstrual period. Sometimes bleeding may occur through the umbilicus. Preoperative diagnosis is difficult. Fine needle aspiration cytology have been used for diagnosis also but confirmation is by histopathology. The differential diagnosis of an umbilical lesion are Hernia, Primary metastatic adenocarcinoma (Sister Joseph’s nodule), Pyogenic granuloma and Lipoma.

Conclusion

Umbilical Endometriosis is a rare entity which deserves attention in the differential diagnosis. Careful history taking and physical examination are essential to make correct diagnosis. After the excision of the benign lesion, repositioning of umbilicus is very important.

Conflict of Interest

The authors declare that there are no conflict of interest.

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