Cesarean scar endometriosis - a case report

Nayyer Sultana¹, Mariam Malik², Ameelia Saddaqt³
¹Assistant Professor, ²Professor, Obstetrics and Gynaecology Department, Central Park Medical College, Lahore, Pakistan
Correspondence to: Dr. Nayyer Sultana, Email: sultana.nayyer@gmail.com

ABSTRACT
Scar site endometriosis is a rare event. It mostly occurs after obstetrics and gynaecological related surgeries. Classical presentation is cyclical pain and swelling at or near scar in relation to menstrual cycle. A case of scar site endometriosis in a 25-year-old female is presented. Patient developed characteristic clinical features 3 years after cesarean section. Clinical diagnosis was supported by ultrasonography. A wide excision with clear margins was curative. High index of clinical suspicion and wide excision remain the keys to successful management.

Keywords
Cesarean section; Scar endometriosis; Diagnosis, Treatment

INTRODUCTION
Endometriosis is defined as presence of endometrium-like tissue outside the endometrial cavity, which induces a chronic, inflammatory reaction and is usually found within the pelvis. Less commonly it is also found at extra pelvic sites such as umbilicus, abdominal and episiotomy scars, lungs, urinary bladder and rectum.¹ Scar site endometriosis has been increasingly reported after cesarean section and vaginal deliveries with episiotomy with an estimated incidence of 0.11%.² In a classical presentation of swelling near previous scar associated with cyclical pain, a thorough history and clinical examination are important to make a diagnosis of scar site endometrioma.³ In a non-classical presentation, diagnosis may be confirmed pre-operatively with ultrasound and FNAC.⁴ Both medical and surgical treatments have been described for successful management of the condition in various studies.⁵

CASE REPORT
A 25-year-old married woman, para 3, presented to the outpatient department of Central Park Teaching Hospital with painful swelling on the left side of previous Cesarean section scar for the last 4 months. She described having pain at the swelling site for the last 2 years. Initially, the pain was low in intensity, occurred periodically with menstruation with no associated swelling. For the last 1 year she noticed cyclical swelling and pain associated with menstruation. The swelling used to appear on the first day of menstruation and increased in size gradually and subsided after menstruation. However, for the last 4 months swelling became persistent with increasing pain with menstruation. She had 3 babies. First two babies were delivered vaginally and the last was delivered 3 years ago through Cesarean section due to preterm premature rupture of membranes. Rest of the history was unremarkable. On examination there was a 2x2 cm painful swelling in left side of Pfannenstiel Cesarean scar. Ultrasound showed a hypoechoic lobulated mass in the subcutaneous soft tissue of lower anterior abdominal wall on the left side of previous scar. Based on history and clinical examination a diagnosis of Cesarean scar endometrioma was made and excision was planned. Incision was made on skin at swelling site. A 2x2 cm mass was seen in subcutaneous tissue with brownish discoloration of surrounding tissue. Brownish discharge was seen in mass. Wide excision with clear margins including normal tissue all around was done and sent for histopathology (Figure 1A). Histopathology confirmed the diagnosis of endometriosis (Figure 1B and 1C). Postoperative course remained uneventful. She is symptoms free with no recurrence of pain or swelling after a follow up of 3 months, 6 months, 1 year, and 2 years.

DISCUSSION
Scar site endometriosis is a rare disease. It is as a result of direct inoculation of endometrial tissue into subcutaneous or facial tissue of the abdominal or scar site which is further stimulated by estrogen. It is seen after cesarean section, vaginal delivery with episiotomy and gynaecological surgeries.² ⁶ The most important antecedent event is Cesarean section, which was seen in 69.7% of cases in one series and 78% in another series.² ⁶ The presentation of scar endometriosis in relation to time period after Cesarean section varied

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among different studies ranging from 3 months to 11 years.5,8 Patient in present report presented 3 years after Cesarean section. Most common presentation is cyclical pain and swelling in association with menstrual cycle with previous history of obstetrical or gynaecological surgery. This classical presentation was seen in 66.7% of patients in one series and 87% of patients in another series.2,6 This classical presentation was seen in our patient as well. Scar endometrioma could be asymptomatic or present with constant pain. In patients with classical presentation, history and clinical findings are pathognomonic of scar site endometrioma and no further investigations including FNAC, CT-scan or MRI are usually recommended. The problem arises in atypical presentation where the clinical diagnosis is in doubt. Other conditions which may be confused with scar site endometrioma include lipoma, incisional hernia, abscess and stitch granuloma. FNAC is a useful tool for diagnosing cutaneous and subcutaneous endometriosis and can be used as first line diagnostic modality.4,5 MRI has been reported as useful imaging in localizing the lesion in atypical presentations.9 Rarely, malignant transformation of scar site endometriosis has been reported.9 It is better to have pretreatment diagnosis with FNAC to select an appropriate management option. Medical treatment including danazol, dydrogesterone and GnRH analogues have been tried but give only partial relief and recurrence after cessation of medication is almost certain. 10 But medical treatment has been seen to be ineffective, and surgical treatment in the form of wide excision and clear margins is the treatment of choice which is both diagnostic and therapeutic.9

**CONCLUSION**

Endometriosis should be suspected in painful swellings appearing at or near scar. In classical presentation, a thorough history and clinical examination is sufficient to make diagnosis. Surgical treatment with wide excision and surrounding clear margins confirmed by histopathology is the treatment of choice.

**REFERENCES**