



ORIGINAL RESEARCH PAPER

Obstetrics & Gynaecology

SCAR ENDOMETRIOSIS : CASE REPORT

KEY WORDS: scar, endometriosis, cesarean scar endometriosis, leuprolide

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ABSTRACT

Surgical management of scar endometriosis followed by medical management.

INTRODUCTION

Endometriosis is defined by the presence and growth of ectopic functional endometrial tissue outside the uterus. Scar endometriosis has been described following obstetrical and gynecological surgery. It is a rare condition, though probably on the rise, due to the considerable increase of cesarean sections performed worldwide. Endometriosis was first described by Karl Von Rokitansky in 1860. It is a chronic gynecologic disorder where the functional and morphological endometrial glands and stroma are present outside the uterine cavity (1) commonly in pelvic structures. It mainly affects women in reproductive ages. Major sites for extra pelvic endometriosis include the lungs, pleura, kidneys, bladder, omentum, bowel, lymph nodes, and abdominal wall. The great variability of symptoms and clinical presentations as well as the limited knowledge on the disease can lead to diagnosis difficulties and delays that are detrimental to the patient's wellbeing and quality of life. (2)

Case Report:

A 31 yrs old married since 11 years p3l2d1 Parity-3, living 2 death 1 (previous 1 full term normal vaginal delivery followed by 1 lower segment cesarean section then Vaginal birth after cesarean section) came with c/o swelling in the lower abdomen in suprapubic region above her lower segment cesarean section scar since 2 years. The swelling increased in size before menses and decreased afterwards and was associated with cyclic pain during menses, spasmodic type, non radiating in nature which relieved 2-3 days after menses since 2 years. The patient did not have any other complaints. Patient gave history of lower segment cesarean section done in 2014 at term in view of Complete placenta previa, leading to delivery of a healthy baby with no postoperative complications to the patient. The patient did not have any other medical or surgical history. Patient had regular menstrual cycles of 28-30 days with moderate bleeding (4-5 days) (2-3 pads/ day) and no previous history of dysmenorrhoea. Patient's first child was a female delivered vaginally at term, died after 2 hrs of life (? Cardiac defect). Second child delivered by lower segment cesarean section i/v/o complete placenta previa, female baby, Healthy with no complications. Third child, male baby delivered by Vaginal birth after cesarean section, alive and healthy with no complications.

On examination done premenstrually the general condition of the patient was fair, pr- 86bpm, bp-110/70mmhg. On examination per abdomen pfannenstiell scar was noted. A mass of approx 7x5 cm felt in the suprapubic region, separate from the subcutaneous tissue more on the right side of midline, irregular surface and edges, firm in consistency, non mobile, non tender. No abnormalities were found on Respiratory System, Cardiovascular System and Central Nervous System examination. Laboratory investigations of the

patient were all within normal limits except CA125- 54 U/ml.

Imaging

On USG a 54x24x49mm mass was noted in the intramuscular region Of anterior abdominal wall in the infraumbilical region. It showed small extension in subcutaneous fat And high resistance to blood flow. ?scar endometriosis On MRI an 80x75x35mm sized irregular Soft tissue mass lesion seen in anterior abdominal wall in the region of previous scar invading the rectus sheath And extending on right as well as left side S/o scar endometriosis. No communicating tissues/ adhesions with bowel, bladder, uterus, ovaries.

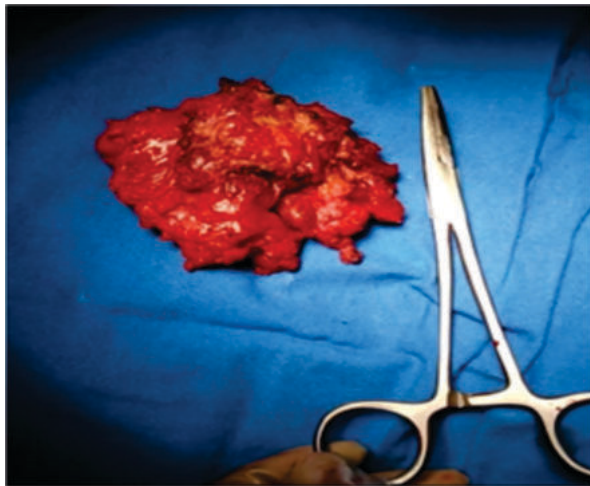
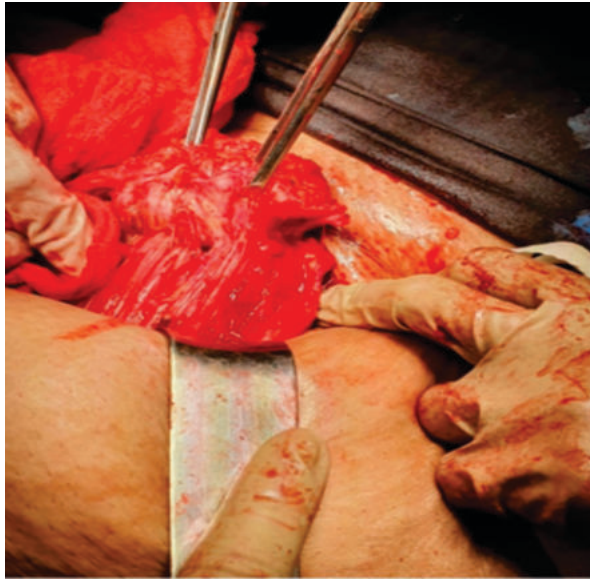
Diagnosis

On the basis of clinical history, examination, CA125 level and radiological imaging findings diagnosis of cesarean scar endometriosis was made

Management

Patient underwent exploratory laparotomy with scar excision and mesh repair. Intra operatively a 6x5x4cm Mass was noted Involving the rectus sheath and some part of the rectus muscle more on the right side than left. Complete excision of the mass with partial excision of surrounding rectus muscle was done and the sample sent for histopathological examination. The defect was closed with an overlay mesh (15x7.5cm) with prolene. The histopathological report of the Mass excised suggested soft tissue (fibroadipose tissue, striated muscle fibre with endometrium type glands surrounded by endometrial stroma, Hemosiderin laden macrophages and large areas of hemorrhage. Findings consistent with the clinical diagnosis of scar endometriosis. The postoperative period of the patient was uneventful. Patient was discharged on leuprolide depot injection 3.75mg IM once monthly for 6 months. The patient was asked to follow up with a repeat CA125 level after a month.





intra operative pictures of scar endometriosis

DISCUSSION

Abdominal wall endometriosis is largely related to previous history of surgery [3]. Endometriosis implants developing in the subcutaneous tissue of surgical scars occur most frequently after gynecological and obstetrical procedures, including cesarean sections, hysterectomies, cystectomies, tubal ligations, and amniocentesis (5). According to Nominato et al., cesarean section remains the most common surgical procedure related to the development of abdominal wall scar endometriosis [6]. They published an estimated incidence of 0.2 to 0.45% though it remains difficult to evaluate as most of the literature available is based on case reports. Ping Zhang et al. did a retrospective study of 198 cases of Cesarean scar endometriosis provided the first evidence that the Pfannenstiel incision carries a higher risk of cesarean section Endometriosis than the vertical midline incision. (4)

The pathogenesis of endometriosis is complex and cesarean section Endometriosis is believed to be the result of a mechanical iatrogenic implantation, through the direct inoculation of the abdominal fascia and/or subcutaneous tissue with endometrial cells during the surgical intervention, which, stimulated by estrogen, become active and expand [7]. Wang et al. examined the factors contributing to cesarean section endometriosis and defined possible causes, including the easy separation and transport of endometrial cells by the amniotic fluid flowing into the pelvic cavity after hysterotomy; the large amount of endometrial cells liberated into the pelvis before hysterotomy closure and that can

potentially be trapped in the wound; and the nurturing role of blood and hormones, after inoculation of the cells, allowing them to grow and develop into subcutaneous masses (8). It is important to highlight that higher incidence is reported after early hysterotomy (end of second or beginning of third trimester), as early decidua seems to have more pluripotential capabilities and can result in enhanced cellular replication producing endometriosis (9). The presence of hormone-sensitive tissue under the skin explains the symptoms reported by our patient, including cyclic pain, swelling Which relieved 2-3 days post menses. Pain—either cyclical or non cyclical—remained the major symptom, reported by more than 80% of patients in the cohorts of Zhang and Liu in China, Ucar et al. in Turkey, and Vellido-Cotelo et al. in Spain [10, 11, 12]. A mass was present at examination of more than 70% of patients in these studies. With regard to imaging, ultrasound is the most accessible, reliable, and cost-effective imaging technique for the diagnosis of cesarean section Endometriosis according to Hensen et al. [13].

CONCLUSION:

Concerning the rising cesarean section rate, cesarean sectionE may occur more frequently than generally assumed. Early diagnosis, treatment, and prevention of cesarean sectionE are worthy of our attention to improve morbidity in patients. (4) It is necessary to take precautions to prevent or reduce the occurrence of cesarean sectionE. On the basis of the implantation theory, a variety of measures are proposed like careful flushing and irrigating before closure, using separate needles for uterine and abdominal closure, not using a sponge to clean the endometrial cavity following complete delivery, extending the breastfeeding period to delay menstruation has also been proposed for preventing cesarean sectionE. (4)

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