

Content available at: <https://www.ipinnovative.com/open-access-journals>

Indian Journal of Obstetrics and Gynecology Research

Journal homepage: www.ijogr.org

Case Report

Caesarean scar endometriosis: A case report

Vidisha Khanna^{1,*}, Nitin Sagar Taneja¹, Vandana Shukla¹, Diwakar Kumar²

¹Dept. of Obstetrics and Gynaecology, Military Hospital, Jabalpur, Madhya Pradesh, India

²Dept. of General Surgery, Military Hospital, Jabalpur, Madhya Pradesh, India



ARTICLE INFO

Article history:

Received 20-06-2021

Accepted 21-10-2021

Available online 20-05-2022

Keywords:

Caesarean scar endometriosis
Abdominal wall endometriosis
Extrapelvic endometriosis

ABSTRACT

Caesarean scar endometriosis has been reported as a rare entity. However, with the obvious rise in caesareans and the cumulative rise in repeat caesareans it is expected that this previously lesser reported entity is likely to be on the rise too. In view of its associated morbidity affecting the quality of life it is helpful to bear this diagnosis in mind as a differential when dealing with new onset dysmenorrhoea after a caesarean and constant complaints related to the stitch line with no obvious findings outside periods. Here we present a case of scar site endometriosis after a caesarean section.

This is an Open Access (OA) journal, and articles are distributed under the terms of the [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License](https://creativecommons.org/licenses/by-nc-sa/4.0/), which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: reprint@ipinnovative.com

1. Introduction

While endometriosis is a fairly common condition in reproductive age group with diagnosis easy to suspect in symptomatic women, scar endometriosis is a rare entity being slightly more common with caesarean section than episiotomy, incidence in the former being around 0.01 - 4%.¹ As expected with the rising number of caesarean sections, repeat caesareans and myomectomies, the burden of this entity is expected to rise. It would therefore need to be considered as a differential diagnosis in new onset symptoms localised to the scar months to years after a caesarean section or episiotomy or, if one is to logically extrapolate, myomectomy (where cavity is entered). Surgical excision is the definitive management as analgesics and gnrh agonists provide partial and temporary relief at best. We here present a case of caesarean scar endometriosis managed surgically after inadequate relief with medical management.

2. Case History

A twenty-five-year old p₂₀₀₂ with a previous one caesarean section (after a vaginal delivery) presented to the outpatient department with new onset dysmenorrhoea for around 4 years (starting around 6 months after her caesarean section). She was examined and no findings suggestive of endometriosis were found including no nodularity of pod. She was prescribed nsaid during periods, but she kept returning with history of intolerable pain during menstruation. Her history was reviewed and it was found that her cyclical pain was the worst along the pfannensteil scar. There was no complaint of discharge or bleeding from the scar. Examination outside periods showed a naïve healthy scar, so she was recalled during periods (Figure 1). At this time the scar showed extremely tender subcutaneous nodularity near the middle over an area of 3cm diameter. There was tenderness on bimanual examination but no nodularity of the pouch of douglas. Ca 125 was 12 and 23 iu/ml on two separate occasions. Ultrasound was done which showed a 2.68 cm by 2.54 cm by 3.15 cm cystic structure beneath the scar with some vascularity (Figure 2) and a normal sized uterus. MRI showed soft tissue intensity

* Corresponding author.

E-mail address: mail4vidisha@gmail.com (V. Khanna).

lesion appearing isointense with rectus abdominis muscle in all pulse sequences and forming a bridge between posterior surface of rectus muscle and anterior surface of the uterus which was normal in size and shape (Figure 3). She chose to try six cycles of gnrh agonist and thereafter opted for surgery in view of inadequate relief and recurrence of symptoms she was taken up for surgery under combined spinal epidural anaesthesia. Incision was made over the area of nodularity marked during periods. Intraoperatively she was found to have thick fibrosed and unyielding endometriotic tissue extending down from rectus sheath and muscle to fundus and anterior body of uterus (a). Omentum and a tented up portion of the bladder were included in the mass (Figure 4 b). A bipolar was used to excise the mass sacrificing involved sheath and muscle with a margin of seemingly normal tissue. The bowel was drawn up with the omentum which was plastered in the bridge between the uterus and therectus muscle. Some tissue had to be fulgurated as excision would have led to cystotomy (Figure 4 c). After closure of peritoneum mesh repair was deemed necessary to compensate for the loss of muscle and sheath to excision (Figure 4 d). A prolene mesh was placed by onlay technique and closure done after placement of a subcutaneous drain. It needs to be emphasised that like pelvic endometriosis the extent of disease cannot be completely determined clinicoradiologically. Postoperatively 11.25mg luprolide was given to suppress residual disease. Histopathology confirmed the presence of endometrial glands in the specimen (Figure 5).



Fig. 1: Healthy pfannensteil scar showing palpable tender nodularity over marked area during periods

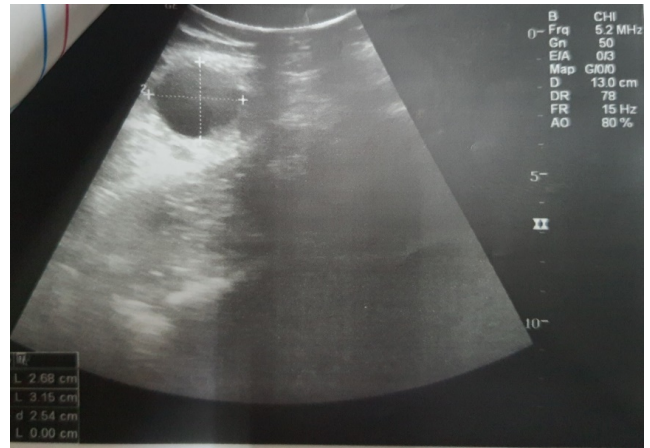


Fig. 2: Ultrasound picture showing a hypoechoic lesion below the scar

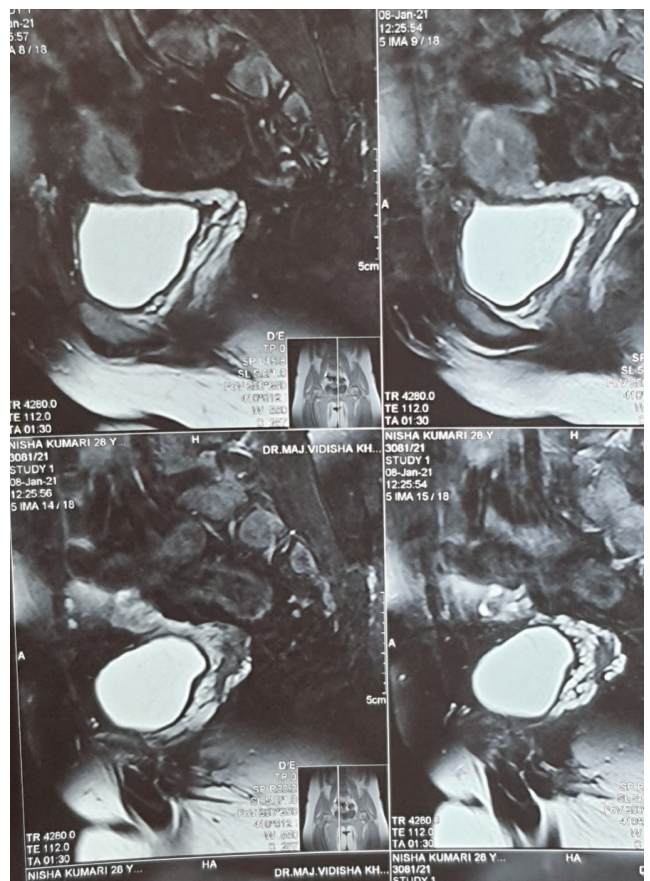


Fig. 3: MRI showing soft tissue lesion isointense with the rectus muscle as a bridge between posterior surface of rectus muscle and anterior surface of uterus

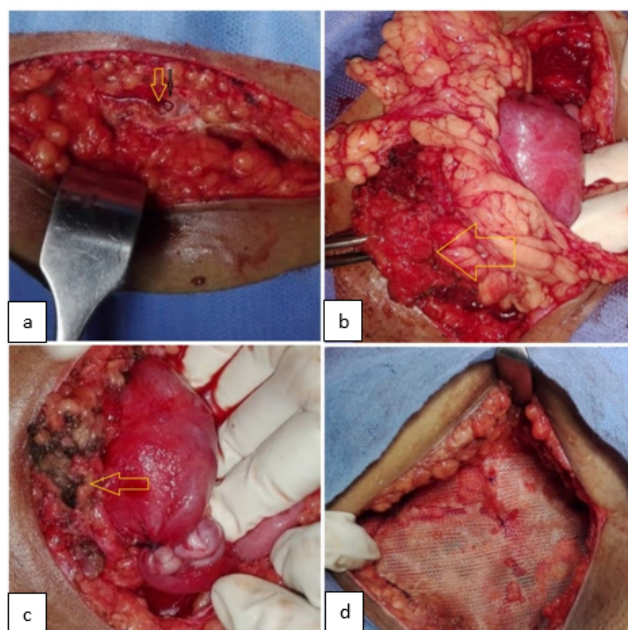


Fig. 4: **a:** Endometriotic tissue with chocolate coloured collection in subcutaneous tissue below scar; **b:** Omentum with tented up portion of bladder included in the endometriotic mass plastered to anterior surface of the uterus; **c:** Fulguration of the tissue which had to be left in order to avoid cystotomy as bladder was drawn up into the omental adhesion; **d:** Prolene mesh was placed to make up the defect in the muscle and sheath created by wide excision

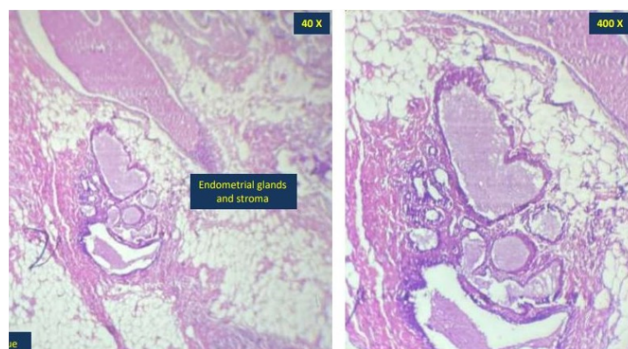


Fig. 5: Hematoxylin and eosin stained smears from the excised tissue showing endometrial glands and stroma embedded in fibrofatty tissue

3. Discussion

Endometriosis, first described by Rokitansky, is described as the presence of functioning endometrial glands and stroma outside the endometrial cavity. Pelvic endometriosis refers to lesions involving the tubes, ovaries and local peritoneum while extrapelvic endometriosis can involve surgical scars, gastrointestinal tract, lungs and urinary tract. Here we focus on abdominal wall endometriosis involving surgical scars of gynaecological or obstetric surgeries ranging from an episiotomy to a hysterotomy, caesarean

section, amniocentesis or myomectomy.² While symptoms of pelvic endometriosis seldom confuse, scar endometriosis can remain elusive unless a very high index of suspicion is supported by thorough examination especially during menstruation. While cyclical bleeding from the scar site along with pain would be as good as confirmatory (as these cases would have a visible tissue or at least pigmentation of the overlying skin due to hemosiderin), cases like the one under discussion can escape diagnosis as there is only cyclical pain localised to the hypogastrium. The finding of tender nodularity along or just below the scar during menstruation needs to be investigated with imaging to help clinch the diagnosis. Imaging should be ultrasound as a first line followed by MRI if deemed necessary. With ultrasound, a scar endometrioma can occur as a fixed solid / cystic or nodule depending on the amount of glandular and stromal component.³ The most common finding is a round or oval heterogeneous hypoechoic area in abdominal incision with surrounding hyperechoic fat. A high resolution transducer is needed to pick up abdominal wall findings. As blood flow is usually though not always limited, Doppler may not help. MRI with its high soft tissue contrast is helpful in delineating between endometriotic lesion and surrounding tissue. There will be hyperintense heterogeneous signal intensities on T1 and T2 images indicative of haemorrhage in glands. The fibrous component will show low intensity on T2 weighted images.³ Once diagnosed, definitive management is wide local excision of the caesarean scar endometriosis as medical management (with hormonal suppression) provides temporary, partial relief at best.⁴ As in the case described one must be prepared for excision of considerable size of sheath and muscle and so preoperative planning for mesh placement must be done to prevent future hernia. Also one must be aware that involvement of bladder and bowel (as in this case) cannot be predicted reliably by imaging so bowel preparation is a must to avoid intraoperative surprises. Surgery for scar endometriosis is to a large extent open and proceed.

4. Source of Funding

None.

5. Conflict of Interest

The authors declare no conflict of interest.

References


1. Kocher M, Hardie A, Schaefer A, McLaren T, Kovacs M. Caesarean section scar endometrioma; a case report and review of the literature. *J Radiol Case Rep.* 2017;11(12):16–26.
2. Paşalega M, Mirea C, Vilcea ID, Vasile I, Pleşea IE, Calotă F, et al. Parietal abdominal endometriosis following Caesarean section. *Rom J Morphol Embryol.* 2011;52(1 Suppl):503–8.
3. Rezvani M, Shaaban AM, Kennedy AM. The role of multimodality imaging after caesarean delivery. *Ultrasound Q.* 2015;31(1):5–18.

4. Uçar MG, Şanlıkan F, Göçmen A. Surgical Treatment of Scar Endometriosis Following Cesarean Section, a Series of 12 Cases. *Indian J Surg.* 2015;77(Suppl 2):682–6.

Vandana Shukla, Gynecologist

Diwakar Kumar, Surgeon

Author biography

Vidisha Khanna, Gynecologist  <https://orcid.org/0000-0001-8117-435X>

Nitin Sagar Taneja, Pathologist

Cite this article: Khanna V, Taneja NS, Shukla V, Kumar D. Cesarean scar endometriosis: A case report. *Indian J Obstet Gynecol Res* 2022;9(2):292-295.