Post hysterectomy scar endometriosis: An unusual entity

Supriya Chaubey, Aruna Nigam and Ummay Kulsoom

DOI: https://doi.org/10.33545/gynae.2024.v8.i4b.1484

Abstract

Scar endometriosis is rare and poses a diagnostic difficulty. Though often asymptomatic, it may present as vague pain in the abdomen during menstruation. Differential diagnoses include abscess, hematoma, sarcoma, desmoid tumour, suture granuloma or metastatic malignancy. Diagnosis is frequently made only after excision and histopathology report. We report a case of a 28 year old multiparous female with a surgical history of uncomplicated cesarean sections followed by total abdominal hysterectomy presented with lower abdominal pain. On examination, a well healed Pfannenstiel incisional scar with a 4x4cm lump in the midline was noted. A diagnosis of scar endometriosis was made. The patient underwent laparotomy. Left sided salpingooophorectomy with excision of endometriotic cyst. Histopathology confirmed the diagnosis of endometriosis.

Conclusion: Scar endometriosis is a rare entity occurring post abdominal surgeries. It poses a diagnostic challenge and confirmation is made only after histopathology. Hence a high degree of suspicion is required to make a diagnosis and guide further treatment.

Keywords: Scar endometriosis, post hysterectomy, further treatment

Introduction

Endometriosis is the presence of endometrial glands and stromal tissue at any site away from the uterus. It occurs in 8% - 15% of reproductive age group females. Due to its variable presentations, its diagnosis is usually a challenge and often confusing. Many theories like implantation theory, tubal regurgitation, coelomic metaplasia or vascular spread have been given to explain its aetiology [1].

Pelvic endometriosis is most common and occurs around uterus and uterine ligaments [2] while, extra pelvic endometriosis is rare and can involve the lungs, brain, ureter, bowel, spleen, and infrequently in the previous surgical scars like previous cesarean scar, episiotomy scar, ectopic pregnancies, salpingostomy or even hysterectomy. Endometriotic glands with stroma above the peritoneum is together called abdominal wall endometriosis [3, 4]. Cesarean scar endometriosis being the most common abdominal wall endometriosis has an incidence of 0.03-0.4% [4-8]. Scar endometriosis occurs possibly due to direct ectopic implantation of the ectopic tissue during the procedure (implantation theory) or by hematogenous or lymphatic spread. This ectopic endometrial tissue proliferates under the effect of cycling oestrogens in the body [9].

Scar endometriosis is rare and poses a diagnostic difficulty. Though often asymptomatic, it may present as vague pain in the abdomen during menstruation. Physical examination may reveal a painful nodule if the scar involved is located on the abdominal wall. However, examination may be absolutely normal if the lesion is located on the uterine scar. Differential diagnoses include abscess, hematoma, sarcoma, desmoid tumour, suture granuloma or metastatic malignancy [5]. Hallmark symptoms of scar endometriosis include cyclic pain associated with drainage or bleeding from the surgical site, during menstruation but unfortunately, these symptoms are often not seen [10].

Diagnosis is frequently made only after excision and histopathology report [11]. Imaging modalities are not absolutely necessary but MRI is the most useful when further studies are needed [2].

Management is primarily a wide margin of surgical excision. Recurrence rate is approximately 4.3% and malignant transformation risk is between 0.3% - 1% [12, 13].

Here we present a typical case of scar endometriosis in a post hysterectomy woman with an intention to emphasize on the need to establish and comprehensively assess and diagnose the potential cases of scar endometriosis.
Case report
We report a case of a 28 year old multiparous female with a surgical history of uncomplicated cesarean sections in 2016 and 2017 followed by total abdominal hysterectomy in 2017 in view of AUB-L. She presented to our OPD with complains of lower abdominal pain with painful micturition and swelling over stitch line for the last four years. The pain was severe and dull aching in nature, intermittent, aggravated by menstruation and urination and relieved on taking medications. Pain radiated to the back and thighs and was associated with deep dyspareunia and white discharge on and off. On examination, a well healed Pfannenstiel incisional scar with a 4x4cm lump in the midline was noted. Moderate tenderness was present over the scar site. Further examination revealed the mass as extra abdominal appearing separate from the vault.
An ultrasound showed evidence of a well-defined hypoechoic lesion of about 5.6x4.2 cm posterior to the abdominal wall scar site with posterior acoustic enhancement and multiple fine septations within, giving a fish-net like appearance. The lesion appeared to be communicating with scar granuloma [Figure 1].

A diagnosis of scar endometriosis was made. The patient underwent laparotomy. Left sided salpingo oophorectomy with excision of endometriotic cyst. Intraoperatively, scar site cyst of around 4x4cm encased in fibrosed tissue extending from subcuticular-plane infiltrating the rectus sheath and the peritoneum muscle was excised. [Fig 2, 3, 4]. Left sided salpingo-oophorectomy with excision of endometriotic cyst was done while right ovary was not visualised. Tissue was sent for histopathology which confirmed the diagnosis of endometriosis.

Discussion
Endometriosis at scar site is a rare entity occurring in less than 2% population, where endometrial tissue and stroma implant at the incision site following abdominal, gynaecological or obstetrical surgeries [2]. Caesarean scar endometriosis is the most common subtype [2,14]. Symptoms can appear anywhere between 1 year to over 20 years following the surgery [15]. The widely accepted theory for its occurrence is the iatrogenic implantation theory, where a refluxed endometrial tissue from gynaecological and obstetrical surgical procedures is implanted on the incision site, and under proper hormonal influence, endometrial tissue proliferates and forms scar endometriosis [4,16]. Endometrium from an early pregnancy has more chances of implanting at ectopic site than endometrium from a full-term pregnancy which implies hysterectomy in pregnancy has a higher risk of scar endometriosis than a full term cesarean section and is preventable by deep cleaning of the abdominal
wound intraoperatively [17]. Scar endometriosis often presents as a tender mass within or around a surgical scar. Pain is cyclical associated with menses. It may also be associated with swelling and rarely bleeding in the lesion area. high index of suspicion with proper history-taking and clinical examination is needed to make a diagnosis. Differential diagnoses include incisional hernia, abscess, suture granuloma, abdominal wall tumour, hematoma, or neuroma [19]. Malignant transformation has also been found, among which endometrioid carcinoma is the most common one [19]. Imaging such as USG, CT scan and MRI can aid in diagnosis and exclusion. Radiological features of endometriosis are quite variable and often create confusion in making a diagnosis. [20]. Histology features are the hallmark of diagnosis which is made only after excision of the lesion [20]. The treatment of choice is a total wide excision of the lesion with at least 5-10mm free margin and it is both diagnostic and therapeutic. Rupture of mass during excision can lead to re-implantation and thus requires utmost care and precision [21, 22, 23].

Medical treatment strategies like oral contraceptive pills, progesterone, GnRH agonist and danazol have been used with variable success and only temporary relief of symptoms [23, 24].

In our case ultrasound was used to make the pre-surgical diagnosis instead of MRI due to affordability issues although MRI is a better modality. Our patient has undergone laparotomy with wide excision of endometriosis under general anaesthesia. The specimen was sent for histopathology which led to the definitive diagnosis.

The etiology in our patient could be a pre-existing asymptomatic scar endometriosis prior to hysterectomy, which slowly progressed after hysterectomy or there might have been spillage of endometriotic xyst while hysterectomy leading to re-implantation as right ovary was absent and left ovary had an endometriotic cyst.

Conclusion

Scar endometriosis is a rare entity occurring post abdominal surgeries. It poses a diagnostic challenge and confirmation is made only after histopathology. Hence a high degree of suspicion is required to make a diagnosis and guide further treatment.

References


International Journal of Clinical Obstetrics and Gynaecology
https://www.gynaecologyjournal.com

~ 113 ~


How to Cite This Article

Creative Commons (CC) License
This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 4.0 International (CC BY-NC-SA 4.0) License, 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.