
CASE REPORT

Anterior abdominal wall endometriosis following Caesarean Section: A Case Report.

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SUMMARY

Endometriosis is the presence of glandular and stromal elements of endometrial tissue in aberrant sites. Extrapelvic endometriosis is rare and possible sites include laparotomy scars, some abdominal viscera and lungs. This is a report of a 28 year woman who presented with a three month history of bleeding from her caesarean section scar during her monthly menstruation, in whom abdominal examination revealed a midline subumbilical scar with a sinus surrounded by area of induration discharging menstium. A wide excision of the lesion was performed and history confirmed endometriosis.

Keywords: Caesarean section, scar endometriosis, polypropylene mesh

INTRODUCTION

Endometriosis, the presence of functional endometrial tissue outside the uterine cavity, was first described by Rokitansky in 1860¹. The condition may be asymptomatic but is often found in association with pain or infertility, or both. Endometriosis occurs in 10-15% of women of reproductive age¹.

Endometriosis commonly occurs in the pelvic organs such as the ovaries, pelvic peritoneum, deep pelvic sub-peritoneal spaces, the pouch of Douglas and the uterosacral ligament¹. Extrapelvic endometriosis is rare. The possible sites include the abdominal wall, the bowel, the peritoneum, the omentum, the umbilicus, hernia sacs, the bladder, the kidney, the lungs, the pleura and the extremities^{2,3}. Abdominal wall is a common site for endometriosis. Abdominal wall endometriosis is related to scars in 1.6% of cases, commonly following obstetrical and gynaecological surgeries^{2,4}.

The occurrence of scar endometriosis

appears to be secondary to the unintentional transfer of endometrial cells from the uterus during a surgical procedure, most commonly caesarean section, and subsequently stimulated by oestrogen to produce endometriomas⁵. This has been well documented in clinical practice following episiotomy, hysterotomy, ectopic pregnancy, laparoscopy and tubal ligation⁶. The second theory suggests that endometrial cells may reach a caesarean section scar through lymphatic or haematogenous routes and subsequently grow into an endometrioma. This may explain the rare occurrence of anterior abdominal wall endometriosis without any prior surgical intervention⁷. The most frequently reported scar endometriosis is that resulting from caesarean section and although it is usually benign, malignant change has been reported⁸.

The clinical presentation of scar endometriosis includes painful, palpable subcutaneous mass associated with cramps and bloating during menses. Although our ability to treat endometriosis successfully is increasing, the condition remains a source of considerable morbidity. We report a case of a 28 year woman who presented with scar-related endometriosis following caesarean section and was successfully managed by wide surgical excision.

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CASE REPORT

A para²⁺⁰ 28 year old woman presented with a history of cyclical painful bleeding from a

caesarean section scar on her abdomen during menstruation for three month (Fig. 1). She had a caesarean section for the delivery of a set of twins a year earlier, and had a repair of incisional hernia not long before presentation in our clinic.

Examination showed an anxious woman with blood pressure of 110/70 mmHg and pulse of 70 beats per minute. Abdominal examination revealed a midline subumbilical scar with a sinus on the upper margin discharging non-clotting blood. There was tenderness around the sinus which was surrounded by an area of induration measuring about 6 Cm in diameter. Vaginal examination showed a healthy vulva, vagina and cervix. Bimanual examination revealed a non tender, mobile, retroverted, 10- week gestation size uterus. A rectal examination finding was not remarkable.

A working diagnosis of endometriosis was made. The haemoglobin level was 12.5g/dl. The leucocyte count and erythrocyte sedimentation rate (ESR) were normal. Ultrasonography showed a mixed echogenic mass on the anterior abdominal wall which was probably the focus of endometriosis. The uterus contained two intramural fibroid seedlings measuring 38mm and 42mm respectively.

The patient had exploratory laparotomy performed. Intraoperatively, there were no obvious lesions on the pelvic peritoneum, uterus, ovaries and no abdomino pelvic adhesions. A wide local excision was performed, with skin, subcutaneous fat and rectus sheath excised with a clear margin (1cm), and the wound was covered with polypropylene mesh. Histological examination showed endometrial glands with stroma (fig 2). She was discharged home seven days later following an uneventful postoperative period. She has remained stable at two weeks follow up.



Fig. 1. Postoperative Scar with sinus opening.

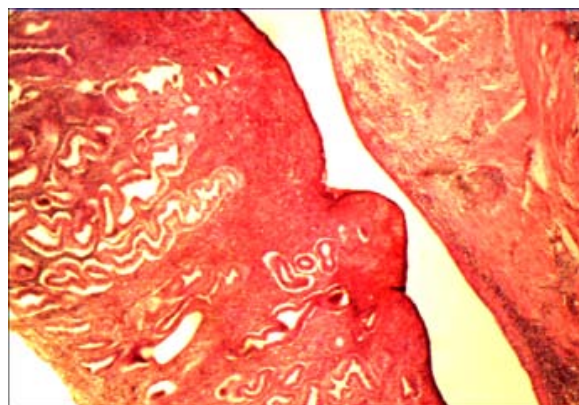


Fig. 2. Photomicrograph ($\times 40$) of specimen removed from anterior abdominal wall.

DISCUSSION

This is the first case of caesarean section scar endometriosis seen in this hospital, located in Awka, capital of Anambra state in Southeast Nigeria with a population of 4.1 million according to 2006 National census figure. The coexistence of pelvic endometriosis and scar endometriosis is rare but does occur⁹.

The incidence of scar endometriosis following hysterotomy is 1.08 – 2% whereas after caesarean section the incidence is 0.03 – 0.4%¹⁰. The higher incidence after hysterotomy has been attributed to the fact that early decidua has more pleuropotential capabilities which can result in cellular replication producing endometriomas. Malignant change of endometriosis in a caesarean scar is rare⁵. It however carries a poor prognosis. The commonest histological subtype is clear cell carcinoma followed by endometrial sarcoma.

Diagnosis of scar endometriosis can be difficult even where all facilities exist. A high index of suspicion is necessary to avoid delay in initiating treatment. It is often misdiagnosed for stitch granuloma, inguinal hernia, lipoma, abscess, cyst, incisional hernia, desmoid tumor, sarcoma, lymphoma or primary and metastatic cancer¹¹. The history of cyclic monthly pain and bleeding through a sinus in the caesarean section scar was pathognomonic for this condition. However imaging techniques, laparoscopy and biopsy are indicated towards better diagnostic approach.

The treatment of choice for caesarean section scar-related endometriosis is always a total wide excision, which may sometimes require mesh cover¹². Medical treatment with the use of progestogens, oral contraceptive pills, and

danazol is not effective and only gives a partial relief in symptoms¹³. Additionally, compliance with medical treatment is unlikely due to the side effects of the hormones such as weight gain, amenorrhoea, acne and hirsutism. The complete excision we performed sufficed, and no further treatment was necessary.

Scar-related, extra-pelvic endometriosis can be difficult to diagnose, even in the best of centres. It is often misdiagnosed as stitch granuloma, inguinal hernia, lipoma, abscess, cyst, incisional hernia, desmoid tumor, sarcoma, lymphoma or primary and metastatic cancer. A high index of suspicion is necessary to avoid delay in initiating treatment. A wide excision usually suffices for the treatment.

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