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CASE REPORT

CESAREAN SCAR ENDOMETRIOSIS – A RARE AND UNDERESTIMATED COMPLICATION

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ABSTRACT

Endometriosis is defined as the presence of the endometrium outside the uterine cavity. Around 8- 15 % of women of the reproductive age group have been affected by it. Abdominal scar endometriosis is a rare complication of the cesarean section and can be often misdiagnosed.

We present a 39-year-old woman who has been complaining of pain and edema at the location of her cesarean incision for the past two years. The pain began on the first day of the menstrual cycle and only continued for the duration of the cycle. Swelling, which started as tiny but grew in size over time, was linked to pain. She had a similar background four years ago. Her vitals were stable during examination, as were her general and systemic examinations. There was a scar mark over the hypogastric region, as well as a 5 x 3 cm swelling in the left lateral angle of that scar. The swelling was tender. Scar endometriosis was seen on USG. Scar endometriosis was removed, and tissue was sent for histopathological examination. Now she is on injection Leuprolide 3.75mg intramuscular every monthly for a period of six months.

We present this case as it is very rare complication and being underestimated by patient.

INTRODUCTION

Endometriosis is defined as the presence of functioning endometrium glands and stroma outside the uterine cavity. Around 8 to 15 % of women of reproductive age suffer from endometriosis and cesarean scar endometriosis (CSE) is a rare complication that constitutes only 12 % of all endometriosis.[1,2] Karl von Rokitansky was the first person to describe endometriosis in 1860.[3] Abdominal wall endometriosis was first introduced in 1903 by Meyer. [4]

CASE REPORT

A 39 years old female history of previous 2 cesarean sections, presented with complaint of pain and swelling at the cesarean incision site for 2 years. The pain started on the day of the menstrual cycle and lasted during the cycle only. The pain was associated with swelling which was initially very small size and increased in size over some time.

She had a similar history of pain and swelling at the incision site 4 years back. i.e after 5 years of her second cesarean section when she underwent USG followed by FNAC which gave the diagnosis of scar endometriosis and underwent excision and biopsy and was kept on follow up on oral hormonal medications but was lost to follow up.

On examination, her vitals were stable. On abdominal examination, a scar mark was noted with a swelling of around 5 x 3 cm in the left lateral angle which was tender.

USG showed a mixed echogenic space-occupying lesion of 4.5 x 2.8 cm in the abdominal wall at the lateral wall of the incision site involving muscle and subcutaneous fat likely scar endometriosis. She underwent excision and tissue was sent for histopathological examination which confirmed the diagnosis. Now she is under Inj. Leuprolide 3.75mg intramuscular every month for 6 months.

DISCUSSION

Endometriosis is a sex hormone-dependent disorder. Endometriosis can be pelvic and extra pelvic and among extra pelvic, abdominal scar endometriosis is the commonest which occur mostly after obstetric and gynecological surgeries but few cases have been reported at episiotomy and appendectomy scar. Spontaneous abdominal wall endometriosis (AWE) has also been mentioned in literature.[3] The presence of ectopic

endometrial tissue in the subcutaneous plane of adipose tissue and muscle layer is called abdominal wall endometriosis. Cesarean section endometriosis (CSE) is one of the types of AWE. [4,5]

The incidence of scar endometriosis is 0.03 %- 1.7.[6] The risk of Scar endometriosis is twice in patient delivered by cesarean section than episiotomy. However, the risk doesn't change with the number of cesarean as seen in our patient.[6]

The other risk factors are non-closure of visceral and parietal peritoneum, increased menstrual flow, and alcohol consumption whereas high parity is protective for endometriosis.[7]

The etiology of endometriosis is multifactorial; various theories have been put forward such as the implantation theory, the coelomic metaplasia theory, and the lymphatic or hematogenic dissemination theory. Iatrogenic implantation of endometrial tissue during surgeries into the abdominal fascia and the subcutaneous plane is considered as the most common cause for SE which could be in our case as well. [8]

Scar endometriosis can present in months to years after surgery but the average time is 30 months and, in our patient, the first episode of scar endometriosis was noted after 2 years of her second cesarean section. Most common presentation is pain (80%) and mass (70%) as seen in our case. Pain in scar endometriosis is usually cyclical but noncyclical pain has also been reported and which was also reported by our patient. The association of concurrent scar endometriosis and pelvic endometriosis is rare but this was seen in our case.[9]

On the background of the history of surgery, cyclical pain, and swelling, diagnosis can be made by various imaging modalities such as USG as done in our case. Other imaging modalities can be CT SCAN and MRI. The diagnosis can be sometimes difficult and require histopathological examination of tissue for definitive diagnosis as done in our case during her first episode. However, the differential diagnosis such as hernia, lipoma, abscess, granuloma, desmoid tumor, or sarcoma and hematoma should be kept in mind.[6,8,10]

For the treatment of scar endometriosis, the gold standard approach is surgical excision – excision of at least 1 cm margin to prevent recurrence which was also done in our case. Medical treatment is reserved for those who can't go for surgery. Medical treatment constitutes hormone suppressing to relieve clinical symptoms but it only gives partial relief and there is always a chance of recurrence on stopping the treatment which was noted in our patient. Other modalities like minimal invasive Cryoablation, injection of alcohol into lesions have also been tried but considered less effective compared to excision.[3,8]

Prevention of SE can be done by avoiding the use of the same surgical tools such as needle and needle holder, suture material surgical tetra for uterus and abdominal wall including subcutaneous layer and also by irrigating of subcutaneous layer, muscle layer by normal saline or water before abdominal closure. Complications such as recurrence (1.5 – 9.1%) which was also seen in our patient and malignant transformation have been reported.[10]

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