

**Case report****“SCAR ENDOMETRIOSIS – A CASE REPORT”**Singh S<sup>1</sup>, L Pavika<sup>2</sup>

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**Abstract:** Scar endometriosis is an infrequent type of extra pelvic endometriosis that pose a diagnostic dilemma and should be in the differential diagnosis of lumps in the abdomen in females. We report a case of 35 year old woman presenting with scar endometriosis, two years after her exploratory laparotomy; which was done for uterine perforation.

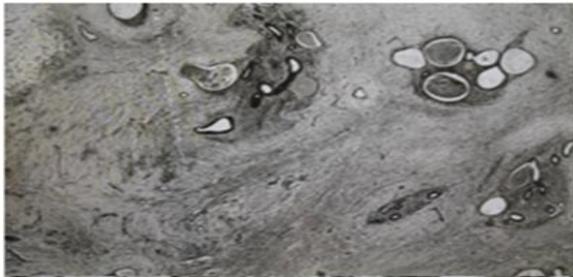
**Keywords:** Local excision, lump abdomen, painful menses, scar endometriosis

**Introduction:** Endometriosis is described as the presence of endometrial-like stroma and glands outside the uterine cavity<sup>[1]</sup>. There are various theories concerning the scar endometriosis. One of them is the direct implantation of the endometrial tissue in scars during the operation<sup>[2]</sup>. Under proper hormonal stimulus, these cells may proliferate (cellular transport theory) or the neighbourhood tissue may undergo metaplasia which leads to scar endometriosis (coelomic metaplasia theory). The endometrial tissue may reach the surgical scar by lymphatic or vascular pathways to generate scar endometriosis.

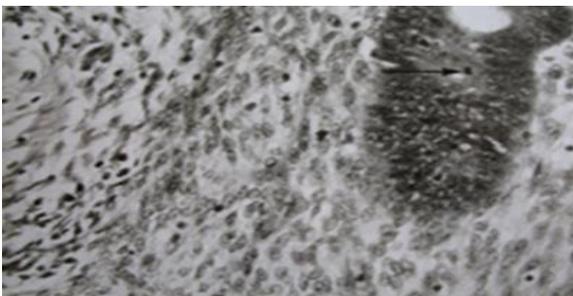
**Case Report:** A 35 year old lady para 1+1 presented to our obstetrics & gynecology-outpatient clinic with chief complaints of pain and bleeding from laparotomy scar site during her menses; for duration of six months. The laparotomy scar mass also increased in size during her menses. At first

she presented to the general surgeon who treated her with an antibiotic course and debridement of the scarred tissue but the patient was not relieved of her symptoms. The patient was finally referred to obstetrics and Gynecology department for further management. On detailed obstetric history; she had a previous full term normal vaginal delivery 10 years back followed by dilatation and curettage of four months pregnancy at a primary health centre 6 months back. During this procedure she developed uterine perforation for which she was referred to a tertiary care centre where she underwent exploratory laparotomy and repair of the rent of size 2×3 cm, on the anterior aspect of the uterine fundus was done. On per abdominal examination there was 2.5x3cm, tender, immobile subcutaneous lump beneath the laparotomy scar site with a small orifice. Nothing abnormal was detected on per vaginal examination. Transvaginal and

transabdominal ultrasound showed a 2×3×2cm, oval-shaped heterogeneous mass within the right rectus abdominal muscle, with no other abnormalities of the uterus and ovaries. Based on the characteristic history, clinical findings and USG report, most probable diagnosis of scar endometriosis was considered. The patient was given depot medroxy progesterone acetate 150 mg, intramuscular injection two doses three months apart, to decrease the size of the endometriotic scar in order to avoid skin split thickness graft. After six months she underwent excision of the scar site without the need for graft. Histopathology of the excised mass confirmed the case of scar endometriosis[**Fig-1&2**]. There was no recurrence in the first year follow up.



**Fig-1: Photomicrograph showing endometriotic glands and stroma embedded in scar tissue. (Low power)**



**Fig-2: Photomicrograph showing endometriotic glands and stroma with mitotic figures (arrow). (High power)**

**Discussion:** Minaglia et al. who analyzed 30 years of incisional endometriosis after caesarean section found the incidence of scar endometriosis to be 0.08%<sup>[3]</sup>. Ectopic pregnancies, salpingostomy puerperal sterilization, laparoscopy, amniocentesis, appendectomy, episiotomy, vaginal hysterectomies and hernial repair are the other surgical causative factors for scar endometriosis<sup>[4-6]</sup>. The reported incidence after midtrimester abortion is about 1%<sup>[7]</sup>. Scar endometriosis is rare presentation, often misdiagnosed as stitch granuloma, inguinal hernia, lipoma, abscess, cyst, incisional hernia<sup>[8]</sup>, desmoid tumor, sarcoma, lymphoma, or primary and metastatic cancer<sup>[9]</sup>.

A high index of suspicion is recommended when a woman presents with post operative abdominal lump<sup>[10]</sup>. Clinical diagnosis of scar endometriosis can be made by a careful history and physical examination. The patients present with a mass near the previous surgical scars accompanied by increasing colicky-like pain during the menstruation<sup>[11]</sup>. Treatment of choice is always total wide excision of the lesion and may sometimes require mesh placement<sup>[9,12]</sup>. Medical treatment with the use of progestogens, oral contraceptive pills and danazol is not effective; it gives only partial relief of symptoms and does not ablate the lesion.

These patients need to be followed up because of the chances of recurrence which require re-excision. In cases of continual recurrence possibility of malignancy needs to be ruled out.

**Conclusion:** Scar endometriosis is a rare and often elusive diagnosis that can lead to both patient and physician frustration. One should maintain a high level of suspicion in any woman presenting with pain at an incisional site, most commonly following pelvic surgery. A thorough history and physical examination should always be performed and every surgeon should consider this entity in their differential diagnosis.

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