

## Case Report

# Scar Endometriosis Presenting as Chronic Lower Abdominal Pain: A Surgeon's Perspective

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### ABSTRACT

*Endometriosis is defined as the abnormal presence of endometrial tissue outside the uterus. Scar endometriosis could go unnoticed or can present with symptoms such as pain in the lower abdomen or as tender nodular lesions over the surgical scar which are usually misdiagnosed as keloid, haematoma, hypertrophied scar, desmoids tumour, cutaneous tumour and stich granuloma. We report a case in a 35 years old female patient who was treated for pelvic inflammatory disease with no relief. We diagnosed the scar lesion as stich granuloma/hypertrophied scar/desmoid tumour. She underwent wide local excision of the Nodular swellings on the caesarean scar with primary closure. HPE confirmed it as scar endometriosis. Patient is relieved of pain abdomen and is symptom free with no recurrence on follow up till date.*

**KEY WORDS:** *Scar endometriosis, PID, Abdominal wall endometriosis.*

### INTRODUCTION

Endometriosis is called as a disease of theories. This was first described by Rokitansky in 1860 as the presence of endometrial tissue outside the uterus.<sup>[1,2]</sup> Abdominal wall endometriosis is usually seen following obstetric and gynaecological surgeries. Scar endometriosis may also go unnoticed when a patient presents with symptoms such as acute or chronic lower abdomen pain and are treated as Pelvic inflammatory disease or cystitis.<sup>[3]</sup>

Scar endometriosis patients are usually misdiagnosed as it is often confused with other surgical conditions as they have similar clinical presentations and features. Sometimes these patients present with painful nodular swellings on the previous caesarean scars and are misinterpreted as hypertrophied scar, keloid, haematoma, stitch granuloma or cutaneous tumors.<sup>[4]</sup>

We report a case in a 35 years old patient who was treated for Pelvic Inflammatory Disease for almost one and a half years with no relief. On examination we diagnosed the lesion over the caesarean scar as hypertrophied scar / stich granuloma / desmoids tumor. She underwent exploration with wide local excision of the two nodular swellings and histopathological examination confirmed as

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scar endometriosis. We report this case to stress on the modes of presentation of endometriosis cases to the surgical out patient departments.

### **CASE ILLUSTRATION**

A 35 Years old female patient with a history of previous caesarean section for her first pregnancy about one and a half years back, presented to us with chronic pain in the lower abdomen and on the caesarean scar region, after one month following surgery. She had been treated as PID conservatively with no relief.

On thorough abdomen examination we found two tender nodular swellings on either ends of the pfannenstiell surgical scar measuring 3x2 cms firm and indurated at skin surface on the right of scar and 4x3cms raised above the skin surface to the left of scar [Fig-1]. Surface was nodular, tender, red to black in colour, firm in consistency, present in the skin and subcutaneous plane. Rest of the abdomen was normal. With a diagnosis of stich granuloma / hypertrophied scar/ desmoids tumour, we got an FNAC of the lesion and it was inconclusive. Ultrasound of the abdomen and pelvis reported as cystic swellings in the subcutaneous plane above the rectus sheath.

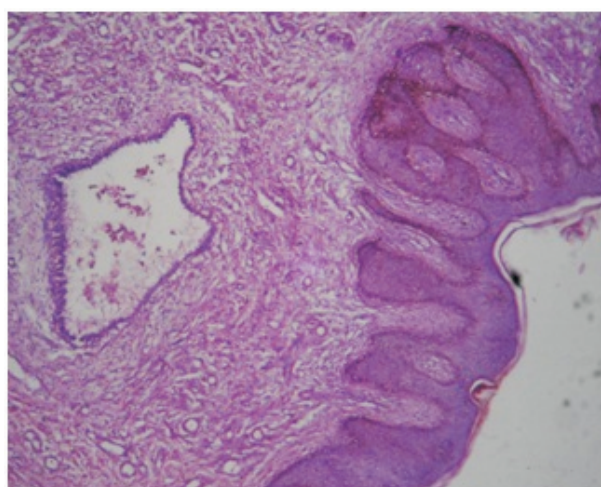
The patient underwent exploration and wide local excision with 1cm margin of the lesion along with the underlying fascia. Operatively the lesion was very vascular with dense adhesions in the skin and subcutaneous tissue abutting on rectus sheath. There was no peritoneal extension of the lesion. The wound was primarily closed after thorough wash with saline [Fig-1 inset].

Histopathological examination of the

specimen reported as section shows epidermis, dermis, subcutaneous tissue and fascia. Dermis and subcutaneous tissue shows illdefined nodular areas consisting of fibrofatty tissue, and fibromuscular tissue within which are seen endometrial glands lined by columnar and cuboidal epithelium. Some glands show dilation. Endometrial stroma are seen at places. No



**Fig: 1- preoperative photograph showing nodular lesions on the caesarean scar. Inset - operative photograph showing wide excision of the lesion followed by primary closure of the wound.**



**Fig: 2 - Microphotograph showing skin with dilated endometrial glands in dermis. (H&E 400x)**

evidence of granuloma or malignancy seen. Features are consistent with scar endometriosis.[Fig-2]

The patient was discharged with danazol 100 mg tid for six months and is symptom free on follow up till date with no recurrence .

## **DISCUSSION**

Endometriosis is known to occur in 10 - 15% of women during their reproductive age and upto 50% in infertile women.<sup>[1]</sup> Scar endometriosis has an incidence of 0.03%-0.15% usually occurring following obstetric and gynaecological surgeries and laparoscopic procedures. Various theories have been put forward to explain this condition. Iatrogenic dissemination or implantation of the endometrial fragments during surgical procedures into the incision site is known to cause scar endometriosis. Patients have seven times risk of endometriosis if a first degree relative is affected.<sup>[2,3]</sup> The presentations of symptoms vary from each individual some have cyclical pain at menses, chronic lower abdominal pain/ chronic pelvic pain. Some times patients present with nodular swellings in the scar region or may be found incidently as seen in our case who was previously treated for PID.<sup>[3,4]</sup>

Literatures have described many diagnostic modalities such as FNAC, MRI, USG, CT SCAN, etc.<sup>[5,6,7]</sup> In our case FNAC was in conclusive. Excision biopsy and histopathological examination has been very accurate in diagnosing this condition.

Medical treatment with gonodotropin agonists, oral contraceptives, danazol, leuprolide acetate have been tried with no

regress in the size of the lesions, but they give only symptomatic relief. Malignant transformation are known to occur hence follow up is advised.<sup>[8,9]</sup>

## **CONCLUSION**

Scar endometriosis should be considered when a female patient presents to the surgeons with pain in the lower abdomen and painful nodules on the surgical scar following caesarean sections or hysterectomy.

Differential diagnosis of scar endometriosis should be included among the other surgical diagnosis such as hypertrophied scar, haematoma, stich granuloma, desmoids tumour and soft tissue tumours at the site of caesarean/hysterectomy scars.

Wide local excision is the surgical treatment of choice for scar endometriosis. Regular follow up is mandatory in these patients as they are known to recur. Adequate care during and after obstetric/gynaec surgery with thorough saline wash of surgical wound can prevent scar endometriosis.

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