

# CASE REPORT

---

## RECTUS SHEATH ENDOMETRIOSIS IN CAESAREAN SCAR

Sunita Mishra<sup>1</sup>, Vrunda Choudhary<sup>2</sup>, Samar Zia<sup>3</sup>, Sunitha AT<sup>4</sup>,

### HOW TO CITE THIS ARTICLE:

Sunita Mishra, Vrunda Choudhary, Samar Zia, Sunitha AT, "Rectus sheath Endometriosis in caesarean scar". Journal of Evolution of Medical and Dental Sciences 2013; Vol. 2, Issue 44, November 04; Page: 8599-8602.

**ABSTRACT:** Endometriosis is a commonly encountered gynecological problem. Here we present a case report of rectus sheath endometriosis following caesarean section which is a rare presentation. Patient presented with pain over the scar area which was cyclical and associated with regular menstrual cycles. Imaging with ultrasonography showed collection in between subcutaneous and muscular planes. She was provisionally diagnosed as a case of scar endometriosis and was planned for wide excision under general anaesthesia. Histopathology study confirmed the diagnosis of endometriosis of rectus sheath.

**KEY WORDS:** Endometriosis, rectus sheath, scar, caesarean, excision.

**INTRODUCTION:** Endometriosis is defined as the presence & proliferation of the endometrium outside the uterine cavity<sup>1</sup>. The most common site of abdominal wall endometriosis is at a caesarean section scar. Incidence of surgically proven scar endometriosis is approximately 1.6 %<sup>2</sup>, as found in a study. Endometriosis is most commonly seen in the abdominal skin & subcutaneous tissue in patients with caesarean scars. It is often confused with numerous surgical conditions. It is very difficult to diagnose a case of scar endometriosis considering its rarity. Very rarely scar endometriosis can be seen in the rectus abdominis muscle<sup>3</sup> or the sheath only<sup>4</sup>. Here we are reporting a rare case of scar endometriosis of the rectus sheath.

**CASE REPORT:** Mrs SL, a 27 year old female presented with complaints of cyclical pain over the lateral part of abdominal scar since 5 months. She was para 3 with 3 previous caesarean sections. No H/O any discharge or lump at the site. Pain & tenderness at the site appeared cyclically during menstrual cycle. Abdominal examination revealed tender fluctuating mass just at the scar site, measuring 3 cm x 2 cm. Ultrasonography was done & a heterogenous collection seen in the muscular & subcutaneous plane measuring 36x 20x 31 mm present over the anterior abdominal wall in suprapubic region.

In view of increasing intensity of pain, patient was posted for a wide local excision under general anaesthesia. Intra operatively, typical bluish black endometriotic spots as powder burn appearance & a small collection of anchovy sauce like fluid seen on the rectus sheath at the lateral part of the scar and also in the subcutaneous fat. Wide excision of the rectus sheath with endometriotic spots was done & sent for HP study.

Histopathological examination showed endometrial glands and stroma interspersed with fibrofatty and fibrocollagenous tissues (refer to Figure 3). Hence diagnosis of endometriosis of rectus sheath was confirmed.

**DISCUSSION:** Endometriosis is defined as the presence of functioning endometrial tissue outside the uterine cavity. The various sites of extrapelvic endometriosis are bladder, kidney, bowel, omentum, lymph nodes, lungs, pleura, extremities, umbilicus, hernia sacs & abdominal wall<sup>5</sup>. Abdominal wall

# CASE REPORT

---

endometriosis is a very rare entity. Usually patients present with a painful mass at the scar site following an obstetric or a gynaecological surgery. The intensity of symptoms vary cyclically with the menstrual cycles.

**Pathophysiology:** Pelvic endometriosis is postulated to be the result of

- Retrograde spread of endometrial cells during menstrual cycle
- Haematogenous, lymphatic or iatrogenic spread
- Metaplasia of pelvic peritoneal cells
- Autoantibody formation & immune system dysfunction<sup>6</sup>
- Extrapelvic endometriosis is postulated to be the result of haematogenous or lymphatic spread of endometrial tissue.<sup>7</sup>

Scar endometriosis is believed to be a direct result of inoculation of endometrial cells into the abdominal wall at the time of surgical intervention. Later, under the influence of oestrogen, endometriomas are formed from these cells. This theory has been convincingly proved by experiments wherein endometrial tissues transplanted in the abdominal wall resulted in subcutaneous endometriosis. In clinical practice, it is encountered in incisions wherever there is a probability of contact with endometrial tissue as in episiotomy, hysterotomy, ectopic pregnancy, laparoscopy, tubal ligation & caesarean section<sup>8</sup>. Time interval between surgery & presentation varied from 3 months to 10 years in different studies. <sup>6</sup>

**Diagnosis:** It is very difficult to diagnose a case of scar endometriosis considering its rare nature. It is easily confused with stitch granuloma, inguinal hernia, lipoma, abscess, cyst, incisional hernia, desmoid tumour, sarcoma, lymphoma, primary or metastatic cancer.

A post operative lump at the scar site should be thoroughly evaluated keeping a high index of suspicion. Good surgical & gynaecological history compounded with thorough examination & appropriate imaging techniques like USG, CT & MRI, usually lead to the correct diagnosis. CT usually shows a well circumscribed solid area whereas MRI is more useful because of its high spatial resolution.

**Management:** The treatment of choice is wide local excision which is both diagnostic as well as therapeutic. Medical treatment with progestogens, oral contraceptive pills, danazol etc have not shown effective results. They only bring about partial relief of symptoms but complete resolution of pathology is not seen. Patient compliance is poor with side effect like amenorrhoea, acne, hirsutism & weight gain. Recently GnRH analogues like leuprolide acetate are being used but it only provides immediate relief of symptoms rather than decreasing the size of the lesion. <sup>9</sup>

**Risk for malignancy:** Malignant change in scar endometriosis is a very rare<sup>10</sup>. Long standing recurrent endometriotic scars can undergo malignant transformation.

**Follow up & prevention:** Follow up of endometriosis patient is very important considering the chances of recurrence, which may require re-excision. Possibility of malignancy must be ruled out in continuously recurring lesions. A good technique & proper care during caesarean section goes a long way in preventing scar endometriosis.

# CASE REPORT

---

**CONCLUSION:** Scar endometriosis as such is difficult to diagnose because of its rarity & is usually unnoticed preoperatively. It is usually diagnosed on clinical grounds after which, the only treatment of wide local excision is feasible. Imaging techniques, laparoscopy & FNAC aid in better diagnostic approach. Frequent recurrences indicate malignant transformation and a poor prognosis.

**ACKNOWLEDGEMENT AND CONFLICT OF INTEREST:** The authors report no conflict of interest & no funding was received for this work.

## REFERENCES:

1. Al- Jabri K, Endometriosis at Caesarean Section Scar, OMJ, 2009 ; 24 : 294-295
2. Kantor WJ, Roberge RJ, Scorza L. Rectus abdominis endometrioma. Am J Emerg Med 1999;17 : 675-677
3. Hashim H, Shami S : Abdominal wall endometriosis in General Surgery. The internet journal of Surgery. 2002;3(2)
4. Celik M, Bulbuloglu E, Buyukbese MA, Cetinkaya A. Abdominal Wall Endometrioma: Localizing in Rectus Abdominis sheath. Turk J Med Sci. 2004;34:341-343
5. Carpenter SE, Markham SM, Rock JA. Extra pelvic endometriosis. Obstet Gynecol Clin North Am 1989;16:193-219
6. Sax HC, Seydel AS, Sickel JZ, Warner ED. Extrapelvic endometriosis: Diagnosis and Treatment. Am J Surg 1996;171:239-241
7. Brenner C, Wohlgemuth S. Scar endometriosis. Surg Gynecol Obstet 1990;170:538-540
8. Bumpers HL, Butler KL, Best IM. Endometrioma of the abdominal wall. Am J Obstet Gynecol 2002;187:1709-1710.
9. Rivlin ME, Das SK, Patel RB, Meeks GR. Leuprolide acetate in management of scar endometriosis. Obstet Gynecol 1995;85:838-839.
10. Sergent F, Baron M, Le Cornec JB, Scotte M, Mace P, Marpeau L. Malignant transformation of abdominal wall endometriosis: a new case report. J Gynecol Obstet Biol Reprod (Paris) 2006;35 :186-190.

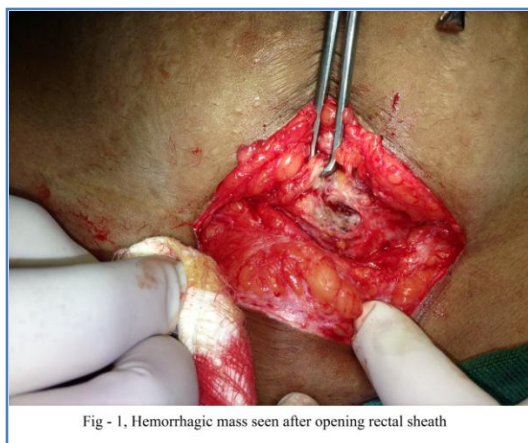


Fig - 1, Hemorrhagic mass seen after opening rectal sheath

# CASE REPORT

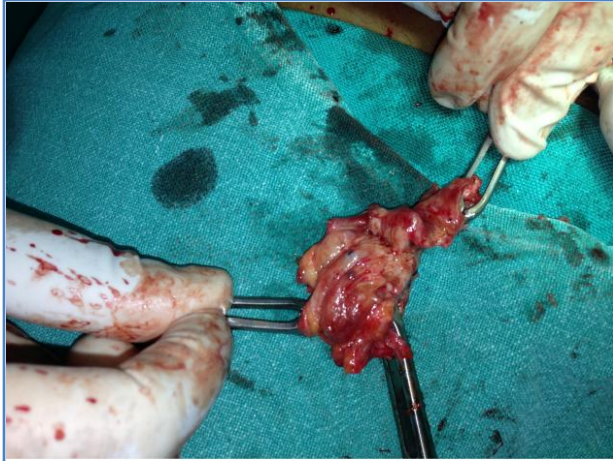


Fig - 2, Excised specimen

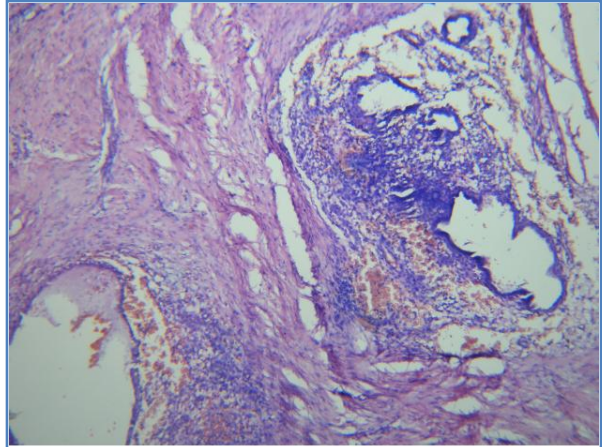


Fig - 3, Histopathological slide of excised mass, showing endometrial glands

## AUTHORS:

1. Sunita Mishra
2. Vrunda Choudhary
3. Samar Zia
4. Sunitha A. T.

## PARTICULARS OF CONTRIBUTORS:

1. Associate Professor, Department of Obstetrics and Gynaecology, Kamineni Institute of Medical Sciences, Sreepuram, Narketpally, Nalgonda District, Andhra Pradesh, India.
2. Associate Professor, Department of Obstetrics and Gynaecology, Kamineni Institute of Medical Sciences, Sreepuram, Narketpally, Nalgonda District, Andhra Pradesh, India.
3. Assistant Professor, Department of Obstetrics and Gynaecology, Kamineni Institute of Medical Sciences, Sreepuram, Narketpally, Nalgonda District, Andhra Pradesh, India.

4. Assistant Professor, Department of Obstetrics and Gynaecology, Kamineni Institute of Medical Sciences, Sreepuram, Narketpally, Nalgonda District, Andhra Pradesh, India.

## NAME ADDRESS EMAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Sunita Mishra,  
S4-7 staff quarters,  
Kamineni Institute of Medical Sciences,  
Sreepuram, Narketpally, Nalgonda District,  
Andhra Pradesh, India.  
Email – drmishrasunita@gmail.com

Date of Submission: 17/10/2013.

Date of Peer Review: 18/10/2013.

Date of Acceptance: 24/10/2013.

Date of Publishing: 30/10/2013