



CAESARIAN SCAR ENDOMETRIOSIS - A RARE ENTITY FOR PAINFUL SCAR: A CASE SERIES AND REVIEW OF LITERATURE

Dr Reena Pal *

Govt Doon Medical College Dehradun Uttarakhand *Corresponding Author

Dr Kunwar Singh

Govt Degree College Thatyur Tehri Garwal

ABSTRACT

Endometriosis is defined as extra-uterine localization of ectopic functional endometrial gland and stroma. Endometriosis can sometimes occur in a previous surgical scar called scar endometriosis as it is rare and uncommon entity so it is very difficult to diagnose. It mostly follows obstetrical and gynecological surgeries. We are reporting 5 cases of scar endometriosis following cesarean section, some of which were misdiagnosed as stitch granuloma initially however imaging techniques and FNAC are indicated towards better diagnostic approach. Medical treatment is helpful in selected cases but wide excision is the treatment of choice. By presenting this paper, and conducting a review of the literature, we intend to increase the awareness of this condition among gynaecologists and general surgeons.

KEYWORDS : Scar endometriosis, Caesarian Section, Surgical excision

INTRODUCTION-

Endometriosis is the presence of endometrial glandular and stromal tissue in areas outside the uterus. It occurs in 10-15% of all women of reproductive age and 25-35% of all infertile women.¹ Although pelvis is most frequently involved but extra pelvic endometriosis has been reported in the bladder, kidney, bowel, omentum, lymph nodes, lungs, pleura, extremities, umbilicus, hernial sacs and abdominal wall.² Scar endometriosis or incisional endometriosis is an infrequent type of extra pelvic endometriosis reported in 0.03-1.08%.³ Usually presents in women who have undergone a previous abdominal or pelvic operation mostly after caesarian section. It is mostly confused with other surgical and dermatological conditions like hernia, abscess, suture granuloma, and lipoma, hematomas, abscesses, cheloids, suture granulomas, sebaceous cysts, malignant tumours including desmoid tumors, sarcomas.⁴

We are reporting 4 cases of incisional endometriosis with history of caesarian section in last 3 years in dept of obstetrics and gynaecology. By reporting the case series and reviewing of the literature, we intend to increase the awareness of this rare condition.

CASE REPORTS-

Case 1- A 25 years female (P1L1) presented in gynaecological clinic with complaints of a swelling on left lateral side of previous Pfannenstiel incision scar since eight months. Patient had previous caesarian section two years back. The swelling was progressively increasing in size and associated with pain during menses. On examination the swelling was 4x3 cm, firm restricted mobility. She was managed initially conservatively as stitch granuloma, but the symptoms remained same. Wide excision of that mass performed. Histopathology showed glands and stroma of endometriosis which confirmed diagnosis of endometriosis of abdominal wall scar.

Case 2- A 27-year female (P3L3), who underwent lower segment cesarean section 3½ years back presented with a painful lesion at the stitch line (Pfannenstiel incision) for the last 2 years. The lesion used to be more painful and hyperemic during menstruation. On per abdominal examination a painful lesion of about 4 cm × 4 cm was found at the right side of the stitch line, which was smooth surfaced and firm in consistency. FNAC revealed hemosiderin laden macrophages and endometrial glands suggestive of endometriosis. The lesion was excised, and histopathological report confirmed it to be scar endometriosis.

Case 3- A 33-year-old woman (P2L2) with the complaints of

swelling and pain at the upper part of cesarean scar for the last 10 years, which was initially present at the time of her menstrual cycle, but later became continuous in nature. She had one prior cesarean delivery 13 years ago, and tubal ligation 10 years ago. Examination revealed a 6 cm × 6cm tender, subcutaneous mass in upper part of the midline vertical scar. The overlying skin was normal. USG revealed the hypo echoic lesion above the ractus sheath. The patient was taken up for wide excision of the mass under local anesthesia, histopathological examination revealed it to be a case of scar endometriosis.

Case 4- A 31-year-old female (P2L2) patient, presented in gynaecology OPD with complaints of a painful mass near the cesarean section scar. Her past medical and surgical histories were insignificant except that she had undergone two cesarean sections and the mass had appeared two years after her last cesarean section. Mass was dark brownish black in color firm, tender, situated on the lower part of the vertical incision measuring 5 x 3cm. USG of local area shows a hypo echoic lesion above the ractus muscle. FNAC was suggestive of endometriosis, patient refused for excision of lesion so she kept on hormonal therapy.(Fig-1)



(Fig-1)-Scar endometriosis

DISCUSSION-

Scar endometriosis a very rare entity, as endometriosis occurring in a surgical scar also known as incisional endometriosis.⁵ Extrapelvic endometriosis is very uncommon with prevalence of 8.5-15% amongst them involvement of skin and soft tissue constitutes only 3.5%.⁶ As it resembles some surgical lesions these cases reported to the general surgeons so remained under reported. The first case of scar

endometriosis was reported by Meyer in 1903.⁷ Scar endometriosis most commonly occurs after gynaecological and obstetrical operations. Incidence of scar endometriosis following hysterotomy is 1.08-2%, whereas after caesarean section, the incidence is 0.03-0.4%.⁸ Higher incidence of scar endometriosis after hysterotomy may be due to more pluripotential capability of early deciduas, resulting in cellular replication producing endometriomas.^{4,5}

According to Pathan et al. seven cases occurred in caesarean and one occurred in a hysterectomy scar.⁸ Horton et al. reviewed 445 cases of abdominal wall endometriosis among which 57, 11 and 12% cases occurred in scars of caesarean section, hysterectomy and other surgical procedures, respectively.⁹ Many theories have been proposed for the cause of scar endometriosis but most commonly accepted theory is the iatrogenic transplantation of endometrial implants to the wound edge during an abdominal or pelvic surgery.^{10,11} Time interval between operation and presentation varies from three months to 10 years in different series.^{3,5} The diagnosis of scar endometriosis may be difficult because characteristic features of classical endometriosis like cyclical changes in the intensity of pain and size of the endometrial implants during menstruation exhibited only in 20% of the patients.¹² Wide surgical excision with at least 1-cm margin on all sides and application of mesh on fascial defect if required is the treatment of choice as medical management with oral contraceptive pills, progesterone and gonadotropin releasing hormone relieves symptoms temporarily and chances of recurrence remains high.¹³ Follow up of endometriosis patients is important because of the chances of recurrence, which may require re-excision

CONCLUSION-

There should be high index of suspicion of incisional endometriosis with a woman presents with painful swelling in the abdominal scar especially with a history of previous gynecological or obstetrical surgery. As this condition usually confused with other surgical conditions, preoperative diagnosis should be made with the help of imaging and FNAC.

REFERENCES-

1. Tsenov, D, Mainkhard K..(2000), "Endometriosis in the surgical scar from caesarean section." *Akash Ginekol (sofiia)* 39, 50-1.
2. Agarwal A, Fong YF.(2008) "Cutaneous endometriosis" *Singapore Med J*,49,704-9.
3. Veda P, Srinivasaiah M,(2010) "Incisional endometriosis: Diagnosed by fine needle aspiration cytology." *J Lab Physicians*, 2,117-20.
4. Blanco RG, Parthivel VS, Shah AK, Gumbs MA, Schein M, Gerst PH.(2003) "Abdominal wall endometriomas." *Am J Surg*,185,596-8.
5. Goel P, Sood SS, Dalal A, Romilla, Menu Y.,(2005) "Caesarean scar endometriosis: Report of two cases." *Indian J Med Sci*,59,495-8.
6. Catalina-Fernández I, López-Presa D, Sáenz-Santamaria J,(2007) "Fine needle aspiration cytology in cutaneous and subcutaneous endometriosis" *Acta Cytol*, 51,380-4.
7. Agarwal N, Subramanian A,(2010) " Endometriosis - Morphology, clinical presentations and molecular pathology." *J Lab Physician*,2,1-9.
8. Pathan SK, Kapila K, Haji BE, Mallik MK, Al-Ansary TA, George SS, (2005) " Cytomorphological spectrum in scar endometriosis: a study of eight cases." *Cytopathology*,16,94-9.
9. Horton JD, Dezee KJ, Ahnfeldt EP, Wagner M.,(2008) "Abdominal wall endometriosis: a surgeon's perspective and review of 445 cases." *Am J Surg*,196,207-12.
10. Tanos B, Anteby SO,(1994) " Caesarean scar endometriosis." *Int J Gynaecol Obstet*,47,163-6.
11. Francica G, Giardiello C, Angelone G, Cristiano S, Finelli R, Tramontano G,(2003) " Abdominal wall endometriosis near cesarean delivery scars." *J Ultrasound Med*,22,1041-7.
12. Ding CD, Hsu S, "Scar endometriosis at the site of cesarean section." *Taiwanese J Obstet Gynecol*,3:47-9.
13. Chiang DT, Teh WT,(2006) " Cutaneous endometriosis: Surgical presentations of a gynaecological condition." *Aust Fam Physician*,35,887-8.