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ABDOMINAL SCAR ENDOMETRIOSIS AS A RARE AND LATE COMPLICATION OF CESAREAN SECTION- CASE REPORTS WITH REVIEW OF LITERATURE.

Obstetrics & Gynaecology

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ABSTRACT

Abdominal scar endometriosis is the commonest extra pelvic site of the pathology, which follows the surgery on the uterus and fallopian tubes. Cesarean section is the commonest such procedure. Very low incidence may be explained by the recently found pathogenesis of genetic, epigenetic, molecular, and immunological changes. Reporting is important for statistical records and varied presentations. The usual presentation of this chronic gynecological pathology is pain and swelling at the abdominal scar site. Its diagnosis is clinical, complimented with Ultrasound and management is surgical excision. We present two post-cesarean cases with localized swelling and pain in the abdominal scar. Both were treated with wide excision of the lesion; the diagnosis was confirmed and malignancy was excluded by histopathology. No recurrence was noted on follow up. This chronic, progressive pain full condition needs prompt diagnosis and management. Patient counseling is mandatory as recurrence and the chance of malignancy are there in recurrent cases. We present here two such rare cases with the aim of statistical record as the reported incidence is <1%, and its unusual presentation.

KEYWORDS

Cesarean Section, Abdominal Scar, Endometriosis, Genetic.

INTRODUCTION:

Endometriosis is defined as the presence of functioning endometrium, both gland and stroma outside the normal uterine cavity.[1] It was first described by K V Rokitansky in 1960, which could be pelvic and /or extra pelvic. Abdominal scar endometriosis (ASE) is the commonest extra pelvic variety with an incidence of 0.03% – 0.45% of total endometriosis.[2] Surgery on the uterus and fallopian tube may lead to this chronic gynecological pathology and the cesarian section is the commonest procedure among all such surgeries.[3]

The exact pathogenesis is not clear. Genetic and Epigenetic changes are observed in endometriosis. A genetic study found 12 single nucleotide polymorphisms at 10 independent genetic loci that are associated with endometriosis. The epigenetic changes identified are methylation and demethylation of DNA and modifications of the histone code .[4,5] Molecular biology denotes the role of the local expression of estrogen receptors.[6] Usual clinical presentation is local pain, mass, and exacerbations during menstruation. There may be unusual presentations also. Ultrasonography (USG) is the commonest, dependable, and cheapest imaging test for the diagnosis of ASE.[3] MRI may be used in small lesions, and CT is a better option to detect the involvement of muscle and subcutaneous tissue.[7] Definitive treatment is surgical excision and histopathology confirms the diagnosis.

Case Reports:

Case No.1:

A 30 year old lady with a history of two lower segment cesarean sections (LSCS) reported to the institution's gynecology outpatient department (OPD) with pain over the abdominal scar for three years. Pain is pricking type, gradually increasing in intensity, non-radiating, not related to work, and no discharge. She could not relate the pain to menstruation. She was not taking any treatment for it. Her menstrual history was within the normal limit (WNL). She underwent the last delivery and tubectomy six years back and both the LSCS were uneventful.

The patient did not have any relevant past or family history. She was of average build; general, systemic, and gynecological examinations were WNL. Abdominal examination revealed a small, firm tender, and fixed mass of 2x2 cm. over the right part of the Pfannenstiel scar. There was no opening or discharge on pressure. Her hematological and biochemical parameters were WNL. USG reported a mass of 1.4x2.1cm at the suture site with the impression of ASE. The patient was prepared and the mass was excised under anesthesia. Histopathology report revealed endometrial glands, surrounded by stromal components within fibro-collagenous scar tissue. Few hemosiderin-laden macrophages and calcification within glands were noted and no evidence of malignancy. The patient was counseled for follow up and no recurrence was reported in three years and eight months of follow up.

Case No. 2:

A 33 year old nontubectomised woman with a history of two LSCS and one abortion reported to the gynecology OPD of the institution with localized swelling at the abdominal scar for seven years and pain during menstruation for three years. A painless swelling of pea size was noticed at the scar site one year after the last LSCS did 8 years back. She developed a gradual increase in the size of the swelling to that of a lemon and developed local pain for the last three years.

She had consulted a local practitioner and taken oral analgesics without any relief. Fine needle aspiration cytology (FNAC) and USG report outside this hospital detected scar endometriosis. The size of the swelling and pain responded to some extent to the injection Depo Medroxy progesterone acetate (DMPA).

Her menstrual history was WNL and did not have any relevant past or family history. Clinical general and systemic examinations were WNL. There was no clinical evidence of pelvic endometriosis. Local examination revealed a mass of 4x5cm, fixed to skin and firm in consistency; on the Pfannenstiel scar with mild tenderness and no discharge on pressure (Fig.1). Review USG reported scar endometriosis (Fig.2).

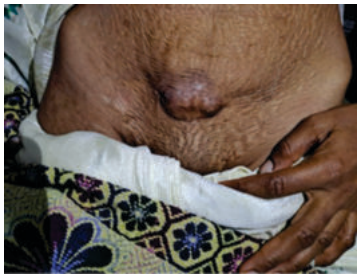

Fig.1- Pre-Op photo of cesarian scar endometriosis.

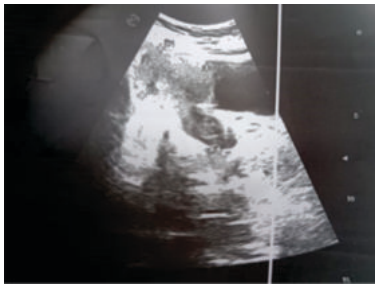

Fig.2- USG showing cesarian scar endometriosis.

Excision of the lesion and abdominal tubectomy was planned as she opined for it. All her relevant hematological and biochemical investigations were WNL. She underwent excision of ASE and bilateral abdominal tubectomy under spinal anesthesia (Fig.3). There was no evidence of pelvic endometriosis on laparotomy and the lesion was limited to the subcutaneous level. The postoperative period was uneventful. The histopathological examination (HPE) report revealed skin and underlying fibroconnective tissue. There were features of abdominal scar endometriosis with moderate chronic inflammatory infiltrate, endometrial stroma, and numerous endometrial glands of varying size with some of the glands showing the collection of intraluminal secretion, with no evidence of malignancy (Fig.4).

Fig.3- Cut section of the cesarian scar endometriosis.

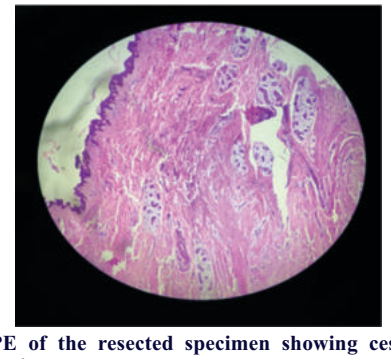

Fig.4- HPE of the resected specimen showing cesarian scar endometriosis.

An intramuscular injection of Depo Medroxyprogesterone acetate 150 mg was given and the patient was discharged with counseling for follow-up. The scar was healthy and the patient was asymptomatic on follow up.

DISCUSSION:

The post-cesarean section ASE incidence is reported to be 0.2 to 0.8%.[3, 8] This low incidence might be absolute because of proposed etiopathogenesis or virtual because of non-reporting. The symptoms usually develop from 3 to 6 years following LSCS.[9]This interval in our patients was three (first case) to seven (second case) years. As the symptoms were not very specific, suspicion of the pathology led to a provisional diagnosis and it was supported by USG and FNAC. Positive FNAC is complementary to clinical and USG diagnosis, but the risk of dissemination cannot be excluded. Histopathology following the excision of the lesion is the confirmatory diagnosis.

Surgery is the definitive treatment.[10]Wide local excision with a healthy margin is important, as the risk of recurrence is 5-9%.[11,12] Counselling and follow-up after primary surgery is required as the risk of endometrioid and clear cell carcinoma in recurrent cases is up to 01%.[13]

CONCLUSION:

Abdominal scar endometriosis is a chronic painful condition; requiring prompt diagnosis and wide surgical excision. Confirmation of the diagnosis by histological examination is the rule. Reporting is important for statistical purposes and varied presentation. The latest findings in the etiopathogenesis of the condition including genetic and epigenetic changes, molecular biology, and immunological factors might be the cause of low incidence in an era of explosive LSCS. In view of recurrence and risk of malignancy, patient counseling and follow up are mandatory for a better outcome.

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Conflicts Of Interest -None declared.

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