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Caesarean Scar Endometriosis: What protocols should surgeons follow?

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Abstract:

Endometriosis is defined as presence of functional endometrial glands and stroma outside uterine cavity. Caesarean Scar Endometriosis (CSE) is a rare condition and is difficult to diagnose. We are reporting a case of CSE involving skin and subcutaneous tissues. The incidence pathogenesis, diagnosis, treatment and preventive measures are discussed.

Introduction:

Endometriosis is existence of functional and morphological endometrial tissue outside uterine cavity¹, affecting an estimated 89 million women of reproductive age world wide². Scar endometriosis is relatively rare, typically occurring in women with a history of caesarean section³.

The actual incidence of abdominal wall endometriosis is unknown. In a case series, prevalence of surgically proven scar endometriosis was 1.6%. Scar endometriosis more commonly involve abdominal skin, subcutaneous tissue compared to muscle and fascia.⁴ One of the most accepted theory about caesarean scar endometriosis is mechanical iatrogenic implantation of endometrial cells into the surgical area, which progress to endometriosis in optimal condition.⁵

Management of caesarean scar endometriosis include wide surgical excision which is definitive treatment, while hormonal suppression by oral contraceptive progestational and GnRH (Gonadotropin-releasing hormone) analogue is only partially effective.⁶

Case Report:

Thirty-years-old female patient presented to our outpatient on 16, August 2018 with complain of cyclical painful swelling and bleeding in previous scar site for the last one year. She was p₄⁺ with previous two LSCS (lower segment caesarean section). Last LSCS was done two and half year back. Complaining of painful

swelling at scar line which increase in size and bleeds during menstruation. On abdominal examination there was a dark brown firm tender mass of 2.5x 2.5 cm in right side of LSCS scar. Our probable diagnosis was scar endometriosis. Wide excision of mass by elliptical incision was done under local anesthesia as it was involving only skin, subcutaneous and fat tissues. Wound closed by mattress suture using prolene. The patient was discharged on same day. On follow up at 8th day stitch line was found well healed. Patient is called for further follow up for any recurrence occur.

Histopathology:

Histopathology findings confirmed scar endometriosis.

Discussion:

Caesarean scar endometriosis is most common form of extra pelvic endometriosis, principally in obstetric or gynecological scars. Incidence of caesarean scar endometriosis is 0.03-0.4%⁷.

Differential diagnosis of CSE includes desmoid tumor, incisional hernia, sarcoma, metastatic malignancy and suture granuloma⁸. Pre-operative non-invasive diagnostic imaging modalities includes ultra-sonography with color doppler, MRI and CT scan. FNAC can also be used for diagnosis. On ultrasound, endometriosis may appear as hypoechoic inhomogenous echo texture with internal scattered hyperechoic echoes, regular margins with infiltration of surrounding tissues. MRI and CT scan are non-specific but may be helpful to see extent of disease.

Treatment of CSE is wide surgical excision with at least 1cm margin clearance is considered as the treatment of choice.

Medical therapy with danazol, combined oral contraceptive pills (COCPS) and GnRH produce only partial relief of symptoms and usually recurrence occur after cessation of treatment⁹.

For prevention of CSE after LSCS, Wasfie recommends that uterus, tube, abdominal wound should be cleaned thoroughly and irrigated with saline, before closure of abdominal wall¹⁰.

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