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Scar Endometriosis: A rare scenario

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Abstract

Scar endometriosis is a rare entity most commonly seen after surgical treatment of the uterus or fallopian tubes. Caesarean scar endometriosis is the most common type of abdominal wall endometriosis. It is usually confused with other dermatological and surgical conditions which delays the diagnosis. We report a case of a 34-year-old patient with scar endometriosis, six years after her lower segment caesarean section. Treatment is surgical and diagnosis is confirmed by histopathological examination.

Keywords: Endometriosis, caesarean scar endometriosis, lower segment caesarean section

Introduction

Endometriosis is a condition in which the endometrial glands and stroma-like lesions are present outside the uterus cavity^[1]. The ectopic endometrial tissue responds to the ovarian hormones^[2]. It generally occurs in pelvic sites like the ovary, posterior cul-de-sac, uterine ligaments, pelvic peritoneum, bowel and rectovaginal septum. Extra pelvic endometriosis can be found in unusual sites like the nervous system, thorax, urinary tract, gastrointestinal tract and cutaneous tissues, most frequent being the abdominal wall^[3]. Although benign in structure, endometriosis has the features of malignancy like spread, invasiveness and transmission. One of the most accepted theories is mechanical iatrogenic implantation^[4]. Wide en bloc excision is both diagnostic and therapeutic. Histopathological examination is confirmatory. Given that it is prone to recurrence, follow-up is crucial.

Case Report

34-year-old female, P5L4, once post caesarean delivery came with complaints of pain and swelling in the left angle of the caesarean scar for 4 months. She noticed that the pain and swelling increased typically with menses with a sense of relief between menses. Her lower segment caesarean section (LSCS) was done 6 years back in emergency in view of non-progress of labour. Her medical and family history were not significant. On examination, a small 3*3 cms firm, irregular, cystic and no tender swelling was noted in the left angle of the LSCS scar with restricted mobility. There was no rise in local temperature or any signs of inflammation. Ultrasonography revealed small incisional hernia. CT scan suggested differential diagnosis of Desmoid tumour and Scar Endometriosis.



Fig 1: Intraoperative picture - Fibrosed and necrotic areas at the left angle of around 3*3 cm

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Fig 2: Excised mass

Wide excision was done and histopathological examination revealed Scar Endometriosis. No recurrence was found in the follow-up period of 1 year.

Discussion

Endometriosis is a ubiquitous and enigmatic disease that continues to challenge both clinicians and researchers [5]. Endometrium is a well circumscribed mass of endometriosis. Generally, few publications have focused on caesarean scar endometriosis and a majority of them are either case series or case reports.

The definitive pathophysiology remains unknown. But few theories are postulated to explain endometriosis [6].

1. **Implantation theory:** Reflux of menstrual blood and its implantation and growth
2. **Coelomic metaplasia theory:** Metaplastic changes in the embryonic cell rests
3. **Metastatic theory:** Embolisation of menstrual fragments through vascular or lymphatic channels.

Direct implantation of endometriosis tissue which is the most widely accepted theory in scar endometriosis. The wound is seeded with the endometrial tissue during caesarean delivery. These endometrial cells survive and multiply when given the right amount of nutrition and hormonal stimulation which ultimately results in caesarean scar endometriosis.

Clinical features range from a painful nodule that has cyclical pain associated with menses to being completely asymptomatic. Women may experience chronic and cyclical lower abdominal discomfort. It typically presents as a hard, palpable mass or lump accompanied by cyclic pain. However, it could be difficult to identify, particularly if it is confined to deeper places or is asymptomatic. It may even take up to 10 years from the onset of symptoms to a certain diagnosis.

Esquivel-Estrada *et al.* (2004) described the triad that is present in cases of scar endometriosis which includes a history of caesarean section or any other gynaecological surgery, cyclical waxing and waning pain accompanied by the patient's menstrual cycle with a tumour inside or near the scar site serving as the clinical diagnostic sign for scar endometriosis [7].

The two non-invasive imaging modalities that are most frequently used for endometriosis are Ultrasonography (USG) and Magnetic Resonance Imaging (MRI). When used to diagnose endometrioses, USG has a sensitivity and specificity of 65% and 95% respectively. MRI has a 90-92% sensitivity and 91-98% specificity for the diagnosis of endometrioses

respectively [8].

Typically, the diagnosis is made after surgery based on the histological report [9]. Medical treatment is not helpful. Wide excision is the treatment of choice. The patient should be followed up for recurrence [10].

Using abdominal compresses on the skin and subcutaneous tissue, using separate tools to close the uterus and abdominal layers and irrigating with saline solution could lower the risk of endometrial tissue growing on incisions. However, pathogenesis also involves endocrine, immune, inflammatory and genetic factors that facilitate the growth of the ectopic implanted cells [11].

Conclusion

Women of reproductive age who experience lower abdomen pain or a mass at the scar site following obstetric-gynaecologic surgery should be evaluated for caesarean scar endometriosis. The likelihood of discovering cutaneous endometriosis has increased due to the rising caesarean section rate. Therefore, preventing cutaneous endometriosis requires education to increase awareness among obstetricians.

Conflict of Interest

Not available

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References

1. Parasar P, Ozcan P, Terry KL. Endometriosis: Epidemiology, Diagnosis and Clinical Management. *Curr Obstet Gynecol Rep.* 2017;6(1):34-41. DOI: 10.1007/s13669-017-0187-1
2. Textbook of operative gynaecology by Wilfred Shaw. Churchill Livingstone, distributed in the U.S. of America by Longman edition, in English - 4th Edition. / Revised by John Howkins and Christopher N Hudson; c1977.
3. Uzunçakmak C, Gültaş A, Özçam H, Dinç K. Scar endometriosis: A case report of this uncommon entity and review of the literature. *Case Rep Obstet Gynecol.* 2013;2013:386783. DOI: 10.1155/2013/386783. EPUB 2013 May 12. PMID: 23762683; PMCID: PMC3665185.
4. Surgical Treatment of Scar Endometriosis Following Cesarean Section, a Series of 12 Cases. *Indian J Surg.* 2015 Dec;77(2):682-6. DOI: 10.1007/s12262-013-0978-1. EPUB 2013 Sep 26. PMID: 26730088; PMCID: PMC4692860.
5. Wolf GC, Singh KB. Cesarean Scar Endometriosis: A review. *Obstetrical & Gynecological Survey.* 1989 Feb;44(2):89-95. PMID: 2915855. DOI: 10.1097/00006254-198902000-00003.
6. Berek, Jonathan S Berek, *Novak's Gynecology.* LWW, 2019, 286.
7. Esquivel-Estrada V, Briones-Garduño JC, Mondragón-Ballesteros R. Endometriosis implant in cesarean section surgical scar. *Cir Cir.* 2004;72:113-115.
8. Sachdeva G, Divyashree PS, Shailaja N. A non-classical presentation of scar endometriosis during pregnancy: Case report and review of literature. *JBRA Assist Reprod.* 2022 Aug 4;26(3):563-566. DOI: 10.5935/1518-0557.20210100. PMID: 34995043; PMCID: PMC9355448.
9. Carsote M, Terzea DC, Valea A, Gheorghisan-Galateanu AA. Abdominal wall endometriosis (A Narrative Review). *Int J Med Sci.* 2020 Feb 10;17(4):536-542. PMID: 32174784; PMCID: PMC7053307.

DOI: 10.7150/ijms.38679.

10. Gupta P, Gupta S. Scar Endometriosis: A Case Report with Literature Review. *Acta Med Iran.* 2015 Dec;53(12):793-5. PMID: 26749239.
11. Ananias P, Luenam K, Melo JP, Jose AM, Yaqub S, Turkistani A, *et al.* Cesarean Section: A Potential and Forgotten Risk for Abdominal Wall Endometriosis. *Cureus.* 2021 Aug 24;13(8):e17410. DOI: 10.7759/cureus.17410. PMID: 34589321; PMCID: PMC8459811.

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