

## Scar Endometriosis Post Caesarean Section: Case Report And Review Of Literature

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**Abstract:** Young females with painful nodule on anterior abdominal wall are often difficult to diagnose but if in association with surgical abdominal scar than possibility of scar endometriosis should be ruled out. This is a case of a young female presenting to us with painful lump in abdominal wall which was later diagnosed as post caesarean scar endometriosis. USG and FNAC prove to be the reliable tools to diagnose such cases.

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### I. Introduction

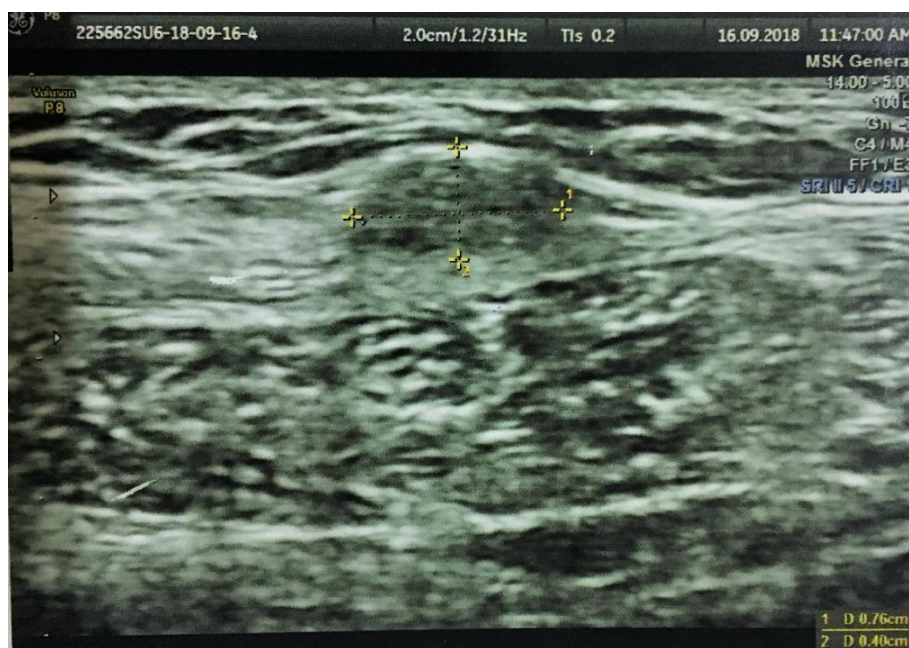
Young females with painful nodule on anterior abdominal wall are often difficult to diagnose but if in association with surgical abdominal scar than possibility of scar endometriosis should be ruled out.

Endometriosis impairs HRQoL (Health related quality of life) and work productivity, yet women continue to experience diagnostic delays in primary care. In a study of Kelechi E. et al they found a delay of 6.7 years between onset of symptoms and a surgical diagnosis of endometriosis.<sup>1</sup>

Abdominal wall endometriosis is one of the most frequent extra pelvic locations, mostly occurring in old surgical scars from obstetrical and gynecological procedures.<sup>2</sup>

### II. Case Report

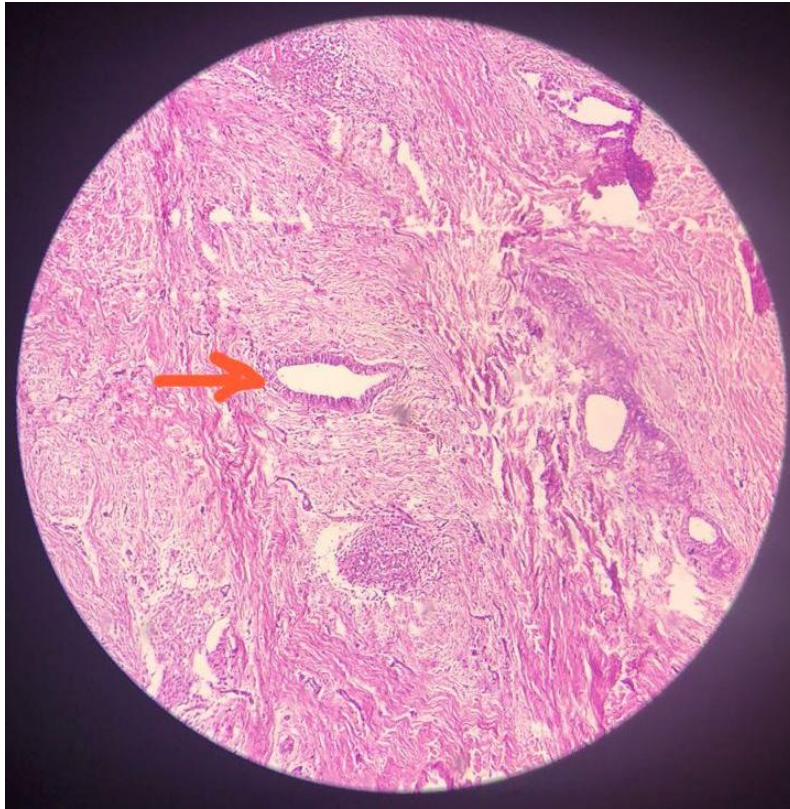
A 28 years old female presented to Mahatma Gandhi Medical College and Hospital, Jaipur with the complaint of lump in lower abdomen since 10 months and cyclical pain in the lump during menstruation. The patient also had history of 2 caesarean sections done (1 and ½ years back and 5 years back). On abdominal examination there was a parietal lump of size 3\*2 cms in hypogastrum with mild tenderness present. On USG Whole Abdomen there was an oval shaped ill defined, hypoechoic area of about 7mm\*8mm in anterior abdominal wall in pelvic region, left to midline between muscle layers- fibrotic tissue.



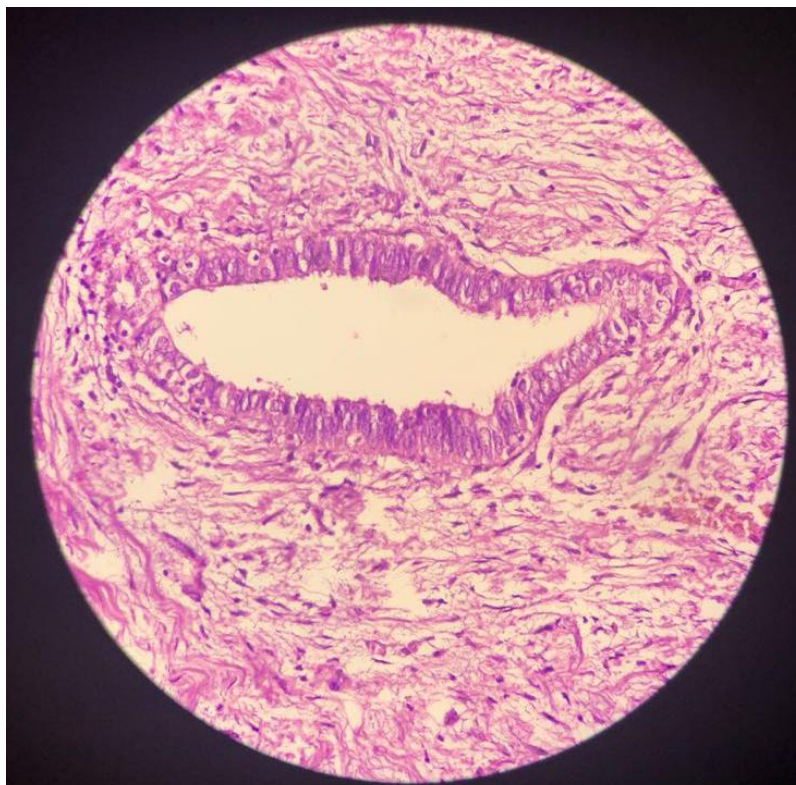
USG of the lump

Excision and biopsy of the lump was done and the lump was sent for histopathological examination which was suggestive of Endometriosis.

**Histopathology:**



At low magnification.



At 40x magnification



### III. Discussion

Endometriosis (the presence of functional endometrial tissue outside the uterus) is a chronic disease associated with pelvic pain and subfertility.<sup>3</sup> The most common locations are within the pelvis, including the ovaries, uterine ligaments, the rectovaginal septum and peritoneum.<sup>4</sup> Unusual sites outside the pelvis includes bladder, intestine, appendix, surgical scars, umbilicus, hernia sac, lung, kidney and extremities.<sup>5</sup> Caesarean section greatly increases risk of scar endometriosis.<sup>6</sup>

The pathogenesis of endometriosis is complex and CSE is believed to be the result of a mechanical iatrogenic implantation, through the direct inoculation of the abdominal fascia and/or subcutaneous tissue with endometrial cells during the surgical intervention, which, stimulated by estrogen, become active and expand.<sup>7</sup> Wang et al. examined the factors contributing to CSE and defined possible causes, including the easy separation and transport of endometrial cells by the amniotic fluid flowing into the pelvic cavity after hysterotomy; the large amount of endometrial cells liberated into the pelvis before hysterotomy closure and that can potentially be trapped in the wound; and the nurturing role of blood and hormones, after inoculation of the cells, allowing them to grow and develop into subcutaneous masses<sup>8</sup>.

The diagnosis of scar endometriosis may be challenging. Cyclical changes in the intensity of pain and size of the endometrial implants during menstruation are usually characteristic of classical endometriosis. However, in the largest reported series to date, only 20% of the patients exhibited these symptoms. Patients usually complain of tenderness to palpation and a raised, unsightly hypertrophic scar.<sup>9</sup> The imaging modalities are nonspecific and more useful for differential diagnoses and detecting the relationship between the mass and the other tissues. These are also used in planning of operative resection, to identify and to evaluate the extent of disease. FNAC provides a safe and effective tool for diagnosis thereby obviating the need for other procedures.<sup>10</sup>

These patients often present to the general surgeons. Medical treatment gives only partial relief and with regard to the almost certain recurrence of the condition after cessation of medication.<sup>11,12</sup> Treatment of choice is wide excision. Surgical treatment is overly recommended.<sup>13,14,15</sup>

### IV. Conclusion

In young females with painful anterior abdominal wall in association with abdominal surgical scar, possibility of scar endometriosis should be ruled out. USG should be done to differentiate it from other pathologies. FNAC aids in diagnosis. Early diagnosis and excision can improve quality of life.

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