

Title: A post-caesarean recurrent chronic vesico-utero-cutaneous discharging sinus

INTRODUCTION

- Sinus tract formation is a rare complication following abdominal surgeries (0.4 in 100 caesareans). (1) Causes range from tubercular infection, liquefaction of adipose tissue or very rarely retention of foreign bodies. (2)
- Suture granuloma- defined as a localized inflammatory reaction secondary to underlying non-absorbable sutures, is a rare cause of sinus tract.
- This is a report of a very unusual case of chronic recurrent discharging sinus following caesarean section.

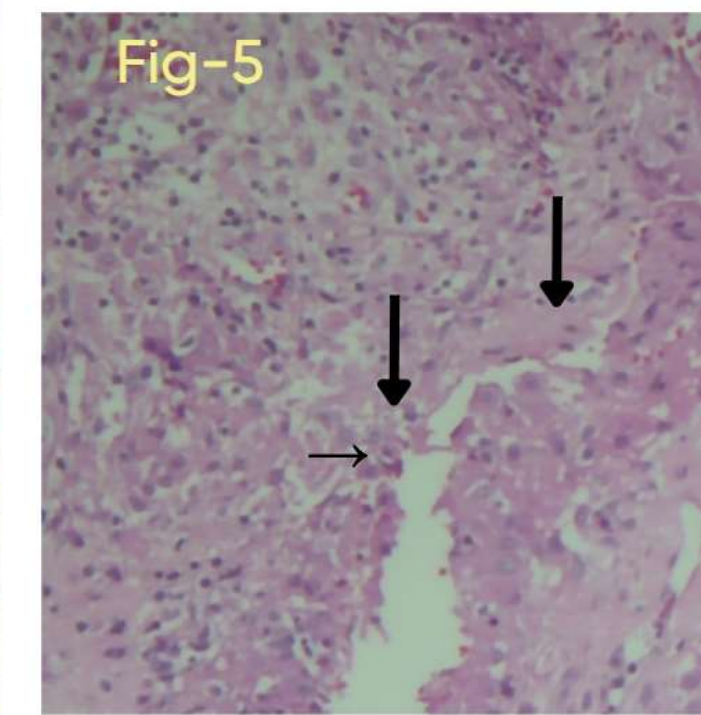
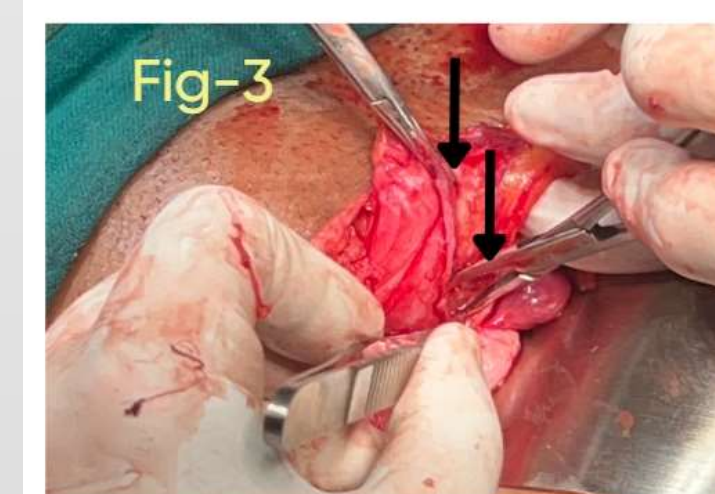
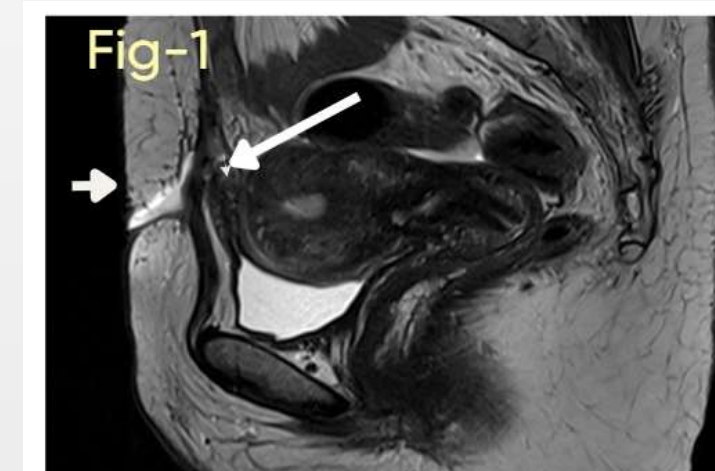
CASE PRESENTATION

- A 31-year-old with history of previous two LSCS (Last birth- seven years ago) **presented with intermittent, non-cyclical purulent discharge for seven years.**
- Past history- symptoms started six months after first LSCS, performed eight years ago. The patient underwent wound debridement with secondary suturing.
- Wound discharge recurred again six months after her second LSCS (seven years ago); patient was treated with multiple antibiotics.
- There was no past history suggestive of Tuberculosis.

- She had moderate pallor and was thin built on examination.
- A 0.5x 0.5 cm raw area with minimal purulent discharge, 3 cm to the right of midline along the transverse LSCS scar was noted.
- Wound swab culture did not yield any growth of microorganisms including **mycobacterium species.**
- High resolution USG of the anterior abdominal wall and a contrast enhanced MRI (**Fig-1**) confirmed presence of sinus tracts with multiple extensions- one tract extending into linea alba and another extending from the dome of the bladder to the uterine fundus (**No communication with uterine cavity**).

SURGICAL PROCEDURE

- An elliptical incision was given on the skin encircling the sinus opening (**Fig-2**).
- Complete excision of the sinus tracts with bladder serosal repair was performed (**Fig-3,4**).
- The rectus sheath was closed using loop **Polydioxanone no.1** sutures. Skin closure done using nylon 2-0 over a subcutaneous corrugated drain.
- Histopathological examination revealed a non-tubercular granulomatous inflammation along the sinus tract suggestive of suture granulomas (**Fig-5**).
- At six-month follow-up, patient did not report any recurrence of symptoms.



DISCUSSION

- The likely cause in this case was the use of a non-absorbable suture nylon and the persistence of infection in the bulky knots.
- The treatment involves complete removal of the sinus tract along with the retained suture.
- Saxena A et al in 2018 reported similar findings where sinus tract excision revealed a retained infected nylon suture causing granuloma. (3)
- It is essential to rule out the presence of a fistulous communication to ensure a complete excision and to determine the need of hysterectomy.

- A recurrent suture granuloma, after excision stresses the nature of the condition and has recently been described in Prolene-induced inflammation by A Sanap et al in 2024. (4)
- Uncorrected anemia and refrainment from using corrugated drains might lead to such wound complications.

CONCLUSION

- Waxing and waning symptomatology- fever, recurrent discharge or swelling from suture site and failure of medical treatment should raise the suspicion of a suture granuloma.
- Appropriate imaging during evaluation, testing for M Tb and visualization of the entire tract, complete excision of all the tract extensions is mandatory.
- Rectus sheath closure with delayed absorbable suture and judicious use of subcutaneous drains are essential to avoid recurrence.

References

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Conflicts of interest: None

Informed consent taken from the patient