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Case Report

# Abdominal Sinus – Pandora's Box

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**Abstract:**

Sinus tract is a blind tract lined by granulation tissue leading from an epithelial surface into the surrounding tissue. Retained foreign body is one of the cause which can also lead to sepsis, intra-abdominal abscess and fistula. The sinus tract can involve the intestine as well as other hollow organs to form fistula if untreated, therefore early diagnosis and treatments important. Chronic sinuses are more commonly seen in head and neck, sinus tract formation following pelvic surgeries for uterine prolapse are rare. A 40 year old female presented with discharge from sinus opening in right iliac fossa since 2 yrs, with a past history of 4 times surgeries for uterine prolapse via abdominal and vaginal approach 16yrs back. Sinogram suggestive of linear blind ending sinus tract of length 2cm and CECT of abdomen and pelvis revealed the linear sinus tract arising from anterior abdominal wall in right iliac fossa showing intraperitoneal extension encircling the rectus abdominis muscles. Patient underwent sinus tract excision with finding been a 6cm long sinus tract extending up to the rectus with mersilene tape as its content. It is crucial to accurately assess the depth and extent of sinus invasion and fistula formation before treatment for personalized treatment plans.

**Keywords:** Sinus tract, Mersilene tape.



## Introduction

The abdominal wall Sinus tract is the blind tract lined by the granulation tissue leading to the epithelial surface(skin), without extension into the abdominal cavity. The sinus tract occurrence can be associated with many factors- surgical factors (use of prosthesis, contaminated surgery), post-operative factors (wound infection) and patient factors that are associated with wound healing(Diabetes, smoking, obesity and immunodeficient conditions).[1]

In this case report we present the case of chronic sinus tract with clinical presentation and management.

## Case Report

40 years old female with no co-morbidity, presented with an intermittent serous type of discharge from the single opening over the skin in right iliac fossa since 2 years, minimal quantity (2-5 ml/day). No history of any skin changes.

Patient give the history of surgery 4 times for uterine prolapse via abdominal (PURANDARE SLING SURGERY)and vaginal approach 16 yrs back.

On examination - the patient was vitally stable. Per abdomen - lower supra pubic incision, the external opening of sinus on the lateral end of the scar on the right iliac fossa

Blood investigation was normal
Sinus tract discharge for gene expert - Negative
Sinogram – linear blind ending sinus tract of length 2 cm, ending above the rectus sheath. (Fig 1)
CECT (Abdomen +Pelvis) – linear sinus tract arising from the anterior abdominal wall in the right iliac fossa showing intraperitoneal extension encircling the rectus abdominis muscle.

**Investigations**

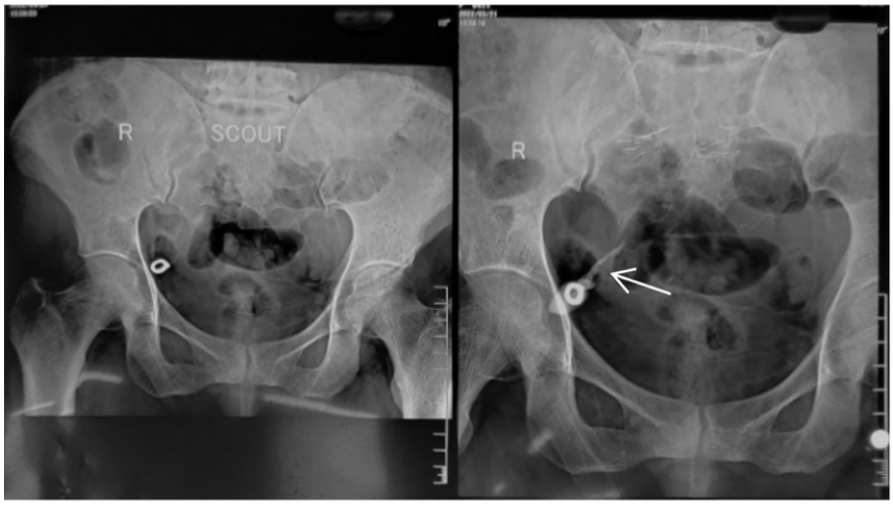
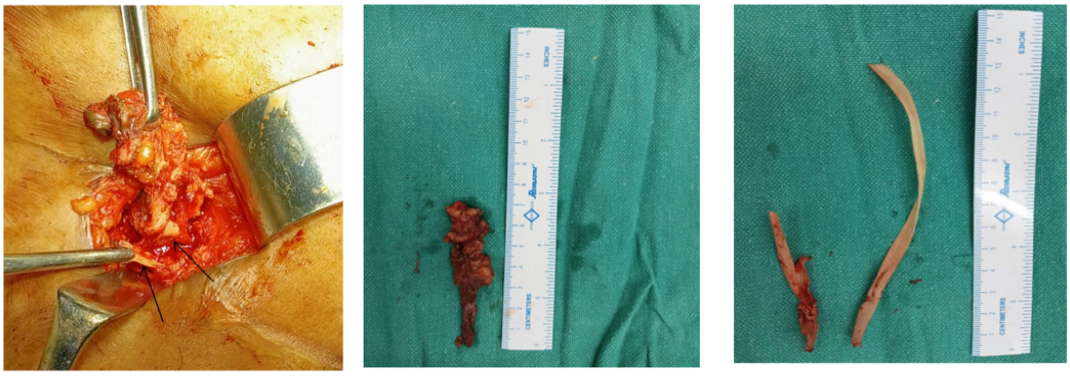



**Fig 1:**

**Management**

The patient was on conservative management for 2 months, symptoms were not relieved.
Patient underwent sinus tract excision with intra op finding of
- 6cm long cylindrical tract extending up to the rectus
- Mersilene tape as a content



intra op sinus tract mersilene tape

**Fig 2:**

The patient was discharged on 2nd postoperative day. Suture removal was done after 14 days.

Histopathological report was suggestive of granulation tissue with mild inflammatory changes. Patient was followed for 2 weeks.

## Discussion

In this case, the patient underwent conservative sling surgeries where mersilene tape was used to fix the aponeurosis of the external oblique muscle and the ends of the tape were crossed in front of the recti to prevent uterine prolapse.[2]

According to the literature most common sling-associated complications include sling erosion which presents as vaginal discharge and bleeding, the persistent sinus tract is a rare complication.[3] With the above clinical features patient is subjected to various investigations that is, sinogram and CECT (Abdomen+Pelvis). The investigation is a must to confirm the diagnosis, and its communication to the abdominal organs and to differentiate the other diagnosis of non-healing sinus which includes malignancy, tuberculosis and the presence of a foreign body.[4] Patient was planned for complete sinus tract excision in addition to the complete foreign body removal. Intraoperative methylene blue staining was done to aid in the identification of the tract and reduce the chances of recurrence.[5]

## Conclusion

Mersilene tape leading to chronic sinus tract formation is an unusual presentation and with local debridement and complete excision of the sinus tract along with its content will provide a complete cure and lesser chances of recurrence.

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