

TOTAL SURGICAL EXCISION FOR CHRONIC PILONIDAL SINUS DISEASE WITH BRANCHING TRACTS: A CASE REPORT¹Dr. Siddhesh Sarda, ²Dr. Vijay Ukhalkar, ³Dr. Rajendra Sonekar

India.

Article Received on 27 July 2026,
Article Revised on 17 August 2026,
Article Published on 01 Sept. 2026,

<https://doi.org/10.5281/zenodo.22160188>

Corresponding Author*Dr. Siddhesh Sarda**

India.



How to cite this Article: ¹Dr. Siddhesh Sarda, ²Dr. Vijay Ukhalkar, ³Dr. Rajendra Sonekar. (2026). Total Surgical Excision For Chronic Pilonidal Sinus Disease With Branching Tracts: A Case Report. World Journal of Pharmaceutical Research, 15(17), 824-827.

This work is licensed under Creative Commons Attribution 4.0 International license.

ABSTRACT

A 24-year-old male with chronic pilonidal sinus disease presented with recurrent pain, persistent purulent discharge and swelling for approximately one year. He was a taxi driver with prolonged daily sitting and had a BMI of 28.4 kg/m². Examination revealed two midline sinus openings, purulent discharge, induration, tenderness and suspected branching disease. Complete excision of the sinus tract, branching extensions and surrounding fibrotic tissue was performed under spinal anesthesia. The wound was left open for healing by secondary intention. Operative time was 45 minutes. Postoperative pain was initially greater and recovery was prolonged, with approximately ten weeks required for complete wound healing and return to work after 21 days. Nevertheless, the wound healed completely without infection or recurrence

during six months of follow-up. This case demonstrates the role of total excision as a definitive option for chronic or complex pilonidal disease.

KEYWORDS: Pilonidal sinus; Total excision; Chronic pilonidal disease; Secondary intention; Case report.

INTRODUCTION

Pilonidal sinus disease is an acquired inflammatory condition of the natal cleft caused by penetration of loose hair and subsequent foreign-body inflammation. Chronic disease may produce persistent discharge, recurrent infection and branching sinus tracts. Complete surgical excision permits direct visualization and removal of diseased tissue and remains an

established option for chronic or complex disease.

CASE PRESENTATION

A 24-year-old male presented with recurrent pain, persistent purulent discharge and swelling over the sacrococcygeal region for approximately one year. He worked as a taxi driver and had prolonged daily sitting. BMI was 28.4 kg/m². There was no history of diabetes mellitus or previous pilonidal surgery. Repeated episodes of discharge and local infection had occurred despite multiple antibiotic courses.

Local examination revealed two midline sinus openings with purulent discharge, surrounding induration and local tenderness. A branching sinus tract was suspected. There was no acute abscess. CBC, blood sugar, HIV, HBsAg, HCV and coagulation profile were within normal limits. The diagnosis was chronic pilonidal sinus disease.

PROCEDURE

Under spinal anesthesia with the patient in the prone jack-knife position, an elliptical incision encompassing all sinus openings was made. The complete pilonidal sinus tract, branching extensions and surrounding fibrotic tissue were excised until healthy tissue margins were obtained. Hemostasis was achieved and the wound was irrigated with normal saline. Because of the extent of excision, the wound was left open for secondary intention healing. No drain was placed. Operative time was 45 minutes.

Postoperative Course

The patient received intravenous antibiotics for 24 hours followed by oral antibiotics, analgesics, daily wound dressing, sitz bath after 48 hours, hair removal and hygiene advice. On day 7, pain was VAS 5/10 with healthy granulation tissue and no infection. On day 14, pain decreased to VAS 3/10 with progressive wound contraction. At one month, wound size had markedly reduced with healthy granulation. At three months, complete wound healing with a healthy scar was documented. At six months, the patient remained asymptomatic without clinical evidence of recurrence.

Outcome

Day-1 pain was recorded as 7/10. Complete healing required approximately ten weeks, and return to work occurred after 21 days. No postoperative complications were reported. The final scar was described as a linear healthy scar. Patient satisfaction was high and there was

no recurrence during six months of follow-up.

DISCUSSION

Total excision allowed direct identification and removal of the primary sinus, branching extensions and surrounding fibrotic tissue. In the present case, complete healing was achieved with no postoperative infection or recurrence during six months of follow-up, although recovery required approximately ten weeks and return to work occurred after 21 days.

Similar favorable long-term results have been reported by Singh *et al.*^[1] in a prospective study of 40 patients undergoing excision and primary closure of pilonidal sinus. Their study reported a mean operative time of 30 minutes, a mean hospital stay of one day, return to normal activities within 8–14 days, and no recurrence during six months of follow-up. One seroma, one hematoma and one wound infection were reported.^[1]

Our case showed a similar important outcome to the study by Singh *et al.*, namely complete clinical healing without recurrence during six months of follow-up. The absence of postoperative infection in our patient was also consistent with the generally favorable postoperative course reported in their series. However, the present case had a longer operative time (45 minutes versus 30 minutes) and longer recovery/return-to-work period (21 days versus 8–14 days), which may be related to the chronic and branching nature of the disease and the use of healing by secondary intention rather than primary closure. Therefore, the reference study supports the favorable definitive outcome observed in our patient, but the postoperative course should not be considered identical.

CONCLUSION

Total surgical excision resulted in complete healing without postoperative infection or recurrence during six months of follow-up in this 24-year-old patient with chronic pilonidal sinus disease and suspected branching tracts. The favorable definitive outcome is comparable to the absence of recurrence reported by Singh *et al.*^[1] although recovery was longer in our case. Complete removal of diseased tissue remains an important option for chronic or complex pilonidal disease.

Ethical Statement

Written informed consent was obtained for publication of the clinical information and images, with identifying information omitted. The source report states that institutional ethics

approval was not required under its institutional policy for this two-patient comparative case report.

REFERENCES

1. Singh A, Kumar S, Jyoti V, Yadav P, Pandey A. Excision and primary closure of pilonidal sinus: excellent results. *Int Surg J.*, 2017; 4(11): 3711–3713. doi:10.18203/2349-2902.isj20174891.
2. Hull TL, Wu J. Pilonidal disease. *Surg Clin North Am.*, 2002; 82(6): 1169–1185.
3. Karydakakis GE. Easy and successful treatment of pilonidal sinus after explanation of its causative process. *Aust N Z J Surg.*, 1992; 62(5): 385–389.
4. Johnson EK, Vogel JD, Cowan ML, et al. Clinical practice guidelines for management of pilonidal disease. *Dis Colon Rectum.*, 2019; 62(2): 146–157.
5. Al-Khamis A, McCallum I, King PM, Bruce J. Healing by primary versus secondary intention after surgical treatment for pilonidal sinus. *Cochrane Database Syst Rev.*, 2010; (1): CD006213.