

Modified Gips Procedure in the Treatment of Pilonidal Sinus Disease: A Case Series

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Background

- Pilonidal sinus disease (PSD) is an inflammatory condition affecting hair follicles beneath the skin of the sacro-coccygeal region, acquired through local trauma and hair penetration, inducing a foreign body reaction.
- The Gips procedure involves minimal soft tissue resection and trephination for excision of draining sinuses without incision closure for young patients at higher risk for wound dehiscence after wide resection and flap reconstruction due to higher activity levels.
- This case report highlights the use of a modified Gips procedure for extensive pilonidal disease involving wide resection where indicated and tissue sparing techniques, combining the Gips procedure and standard flap advancement to decrease wound dehiscence complications.

Case Presentation

Three patients, 17-year-old male, 32-year-old male, and 35-year-old female presented with chronic pilonidal cysts despite comprehensive wound management and now required surgical intervention.

Methods

- First, methylene blue was used to visualize the tunnels, followed by excision with a dermal curette.
- Where there was no disease in areas of the gluteal cleft and in patients requiring wide resection flap advancement, skin bridges were preserved.
- These skin bridges function like native retention sutures, sparing tissue to prevent wide resection and wide dehiscence risks.
- A combination closure was used to heal with more tissue preservation and fewer complications.
- Quarter-inch iodine impregnated gauze wicks were placed throughout the tunnel to provide deep drainage.
- Post-operative care involved minor outpatient wound care and culture-directed antibiotic therapy.



Figure 1: Pre-operative status of pilonidal sinus sease in a 17-year-old male patien

Figure 2: Intraoperative excision of PSD with the use of skin bridges for tissue preservation

Figure 3: Intraoperative hair removed from sinus tunnels

Figure 8: Fully healed incisions at 14 weeks

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Key Pearls

- The modified Gips procedure is successful in treatment of PSD in vouna patients with higher activity levels.
- The modified Gips procedure combines wide resection and tissue sparing techniques, minimizing wound healing complications.

Results

- All patients required minor outpatient wound care in the wound clinic and healed well with no evidence of large dehiscence of their surgical incisions.
- None noted recurrence of pilonidal sinus disease to date.

Conclusion

- This case report highlights the use of a modified Gips procedure to ensure quick recovery, lower wound complication and dehiscence rates, and greater long-term cure rate in the treatment of PSD.
- This modified technique combines the tissue preservation technique with surgical closure and wide drainage to accomplish tissue preservation and minimize open wounds for patients with PSD.

References

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Figure 5: Pre-operative status of pilonida is disease in a 32-year-old male patient Figure 6: Intraoperative excision of PSD with the use of wide resection and skin bridge

Figure 7: Post-operative status

Case 2

Figure 4: Fully healed incisions at 6 weeks post-op