

Umbilical Pilonidal Sinus: A New Treatment Technique of Sinus Excision with Umbilical Preservation

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Although pilonidal sinus is common in the sacrococcygeal region, it is rare at the umbilicus. Although there are a few reports of successful nonsurgical management, most authors advocate complete excision of the umbilicus as a curative treatment.¹⁻³ We report a case of umbilical pilonidal sinus that was successfully treated by excision of the sinus with preservation of the umbilicus.

Case Report

An otherwise healthy 22-year-old man of Asian Indian ethnicity presented with a 2-year history of recurrent, intermittent purulent discharge and itching from the umbilicus. There was no fever or intra-abdominal symptoms. On examination, he had very hairy abdominal wall, and after cleaning pus from the umbilicus, bits of hair could be seen in the depths of the cleft.

Under general anesthesia, careful inspection revealed a 3-mm ulcerated site in the depth of the umbilicus from which bits of hair protruded. A vertical skin incision through the umbilicus skirting one side of the sinuses was made. Diathermy cutting was used to minimize bleeding and ensure visibility of the lesion. There were several strands of hair projecting through three sinus openings (Figure 1). These communicated with a single subcutaneous tract that reached the sheath in the midline but did not branch laterally. All three openings and the tract were



Figure 1. Incision through the umbilicus facilitating better visibility of hair projecting from the sinuses.

completely excised using a probe as a guide (Figure 2), approaching the tract superiorly, inferiorly, and laterally deep to the umbilicus, excluding the umbilical cicatrix and thus preserving it. The skin was closed primarily with subcuticular polypropylene, and the patient was given a course of antibiotics. He recovered uneventfully, had the sutures removed 10 days postoperatively, and has had no recurrence at 2 years.

Discussion

Although the most commonly recommended surgical treatment for umbilical pilonidal sinus is umbilectomy,¹⁻⁴ this may be more radical than necessary. It appears that this disease is significantly different from the sacrococcygeal variety because the recurrence rate is low, and conservative treatment by

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Figure 2. Subcutaneous tract in the midline without branching.

simply cleaning the area and removing the fragments of hair often results in cure.⁵ Neither of these is true for sacrococcygeal pilonidal disease.

Although most surgeons extend a midline incision around the umbilicus, it has been shown that cutting through the umbilicus has no disadvantage and is superior cosmetically.⁶ We chose to incise through the umbilicus, not only for these reasons, but also because it offers a direct approach and excellent exposure of the pathology, especially if meticulous hemostasis is ensured using diathermy. A direct approach to the lesion is not only likely to produce cure, but also offers an opportunity to better

understand the pathology and anatomy of this uncommon lesion and to appreciate its differences from the sacrococcygeal disease.

In summary, umbilical pilonidal sinus can be successfully managed by excision of the sinus with umbilical preservation, without the need for umbilectomy. This limited resection is likely to be effective because umbilical pilonidal disease is significantly different from the sacrococcygeal condition, with low recurrence rates and absence of multiple tracts. In addition, incision through the umbilicus results in a better cosmetic result and more accurate appreciation of the anatomic pathology than umbilectomy or a periumbilical incision.

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