Umbilical Pilonidal Sinus: A Rare Presentation

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Pilonidal sinus is common in the sacrococcygeal region. It is rare at the umbilicus. Incidence being 0.6%, we report a case of umbilical pilonidal sinus treated in our hospital. A 20-year-old male patient was admitted to our hospital with complaints of purulent discharge from the umbilicus since 3 months. Patient was posted for omphalectomy. Intraoperatively, a tuft of hair was found in a sinus tract communicating with the umbilicus. Histopathological evaluation was compatible with pilonidal sinus disease. There are only a few reports of the umbilical pilonidal sinus in the literature. Umbilical sinus tract differs from the sacrococcygeal variety in the absence of multiple tracts and low recurrence rates. Treatment options and differential diagnosis are discussed in the article.

Keywords: Hair, Pilonidal sinus, Umbilicus

INTRODUCTION

Pilonidal sinus was first described by Anderson (1847). It is common in the sacrococcygeal region. It is rare at the umbilicus. Goodall reported 163 cases of pilonidal sinus, of which only one involved umbilicus, which makes an incidence of 0.6%. There are only a few reports of the umbilical pilonidal sinus in the literature. The other rare locations for pilonidal sinus include the scalp, clitoris, interdigital area, axilla, penis, and forehead. We report a case of umbilical pilonidal sinus treated at our hospital. Treatment options and differential diagnosis are discussed in the article.

CASE REPORT

A 20-year-old male patient was admitted to our hospital with complaints of purulent discharge from the umbilicus since 3 months (Figure 1).

On examination, the umbilicus was central and normal in shape but with a central discharging sinus. It was also noted that the patient had a hairy anterior abdominal wall. An abdominal ultrasonography ruled out a patent urachus. Complete blood picture showed elevated total leucocyte counts at 12,000/dl. Otherwise unremarkable. Blood culture report was negative. Pus culture was positive for Staphylococcus aureus (Figure 2).

Since the discharge did not subside with a course of intravenous antibiotics, a diagnosis of chronic omphalitis was made. Patient was posted for omphalectomy.

Under spinal anesthesia, omphalectomy was done with an elliptical incision around the umbilicus.

Intraoperatively, a tuft of hair was found in a sinus tract communicating with the umbilicus (Figure 3).

Hence, an intraoperative diagnosis of an umbilical pilonidal sinus was made.
Histopathological evaluation was compatible with pilonidal sinus disease. Findings included granulation tissue, cellular infiltrate of inflammatory cells, and foreign body giant cells (Figure 4).

Follow-up revealed no recurrences.

**DISCUSSION**

Umbilical pilonidal sinus is a rare condition with an incidence of 0.6%. It is an acquired disease. A combination of factors account for its occurrence, which include:

- Deep navel
- Inadequate personal hygiene
- Hairiness
- Male sex and
- Young age.

Omphalectomy is commonly performed for umbilical pilonidal sinus. However, the disease can be managed by excision of the sinus tract with umbilical preservation without the need for omphalectomy; as it usually doesn’t have multiple tracts and has low recurrence rates.

Some authors advocate conservative management in the form of hair extraction, antibiotics, skin care, and regular dressing as the first line of treatment with surgery being reserved for resistant and/or recurrent cases.

The histopathological appearance of the lesion is characteristic of a foreign body granuloma. An epithelial-lined sinus tract leads to an area of fibrosis and granulation tissue surrounding hair shafts.

Umbilical sinus tract differs from the sacrococcygeal variety in the absence of multiple tracts and low recurrence rates.

Thus, pilonidal sinus has to be considered among the differential diagnosis of adults presenting with discharge from umbilicus; the other causes of which include urachal anomalies, omphalitis with abscess, vitelline umbilical sinus, recurrent folliculitis, and ulcerated umbilical hernia.

**CONCLUSION**

Pilonidal sinus disease is a rare occurrence at the umbilicus. However, it should be considered in the differential diagnosis of patients with discharge from umbilicus; especially in young hairy males with a deep navel.

**REFERENCES**