



Umbilical Pilonidal Sinus –A Rare Case Report

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ABSTRACT

Pilonidal sinus is a common disease of sacrococcygeal region involving natal cleft. However, it is also observed in the periumbilical area. There are only a few reports about umbilical pilonidal sinus in the literature. Here we report a case of umbilical pilonidal sinus in a young female which presented as a chronic discharging umbilicus with periodical pain and swelling. It was managed surgically with excision of sinus tract and reconstruction of umbilicus.

KEYWORDS : Umbilicus,Pilonidal sinus,Hair follicle,Reconstruction

INTRODUCTION

Pilonidal sinus literally means a nest of hair [1]. Sacrococcygeal region is the most common site for pilonidal sinus formation, other uncommon locations being axilla, between the breasts, the perineum, and the penile shaft, or in spaces between the fingers. There occurs a chronic inflammatory reaction to fragments of hair shaft penetrating epidermis from the cutaneous surface leading to infection and sinus tract formation. Umbilical pilonidal sinus is a rare entity presenting as painful swelling and discharge from the umbilicus [2]. Treatment of this disease ranges from conservative non-surgical treatment to a more aggressive approach such as total excision of the umbilicus followed by delayed reconstruction [3]. Herein, we report a case of Umbilical pilonidal sinus in a young female in which surgical excision with creation of a neo-umbilicus was performed.

CASE PRESENTATION

A 22-year-old, female patient presented with a 2-year history of a purulent discharge from the umbilicus. There were episodes of increasing discharge and pain in the umbilicus which got relieved on taking antibiotics and analgesics. Past medical and surgical history was insignificant. Upon examination, umbilical cleft had a brownish black scab with multiple hairy bodies including loose hair shafts and foul smelling purulent discharge. Ultrasonography revealed areas of altered echogenicity and no visceral attachment. After injecting 10% Methylene blue dye into the sinus tract a circumferential incision along the periumbilical area was given and deepened till rectus sheath was visualized. The sinus was extending up to but not breaching through the rectus sheath. Reconstruction of the umbilicus was done by mobilizing surrounding tissues and creating a neo-umbilicus. The follow up period lasted for one year and no complications or recurrence was observed.



Post-operative specimen showing hair follicles



Reconstructed Umbilicus



Umbilical Pilonidal sinus

DISCUSSION

Pilonidal sinus disease is a common surgical disorder of natal cleft. The disease generally occurs in the sacrococcygeal region but has also been reported in other locations in which an anatomical cleft facilitates an accumulation of hair, including the axilla, between the breasts, the perineum, and the penile shaft. A negative pressure is created during body movements at the above-mentioned sites, leading to penetration of the hair shafts into the skin with a resultant foreign body reaction and development of a sinus lined by granulation tissue [2]. An umbilical pilonidal sinus is the rarest variant accounting for only up to 0.6% of cases.

The clinical features of an umbilical pilonidal sinus include pain, swelling and purulent discharge from the umbilicus. Risk factors include male gender, young age, a deep navel, hairiness, and poor personal hygiene. It should be differentiated from pyogenic granuloma, urachal and epidermoid cysts [4]. Imaging is generally done to rule out patent vitellointestinal duct.

Conservative treatment in the form of hair extraction and improved umbilical hygiene can be tried in few cases but most of the cases need surgical exploration of the sinus. Occasionally, an incision and drainage of an abscess may be necessary. For cases that are not responding to conservative management, surgical excision with reconstruction of the umbilicus is the definitive treatment [5]. According to Azzam Al-Kadi et al the technique of leaving a portion at the mouth of the umbilicus followed by sinus excision and subsequent reconstruction with left over umbilical walls to be effective in producing a cosmetically acceptable and easy to clean / shallow umbilicus [6].

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REFERENCES

1. McClenathan JM. Umbilical pilonidal sinus. *Can J Surg.* 2000;43(3):225-227. [PMC free article][PubMed] | 2. Goodall P. The Etiology and treatment of the pilonidal sinus. *Dig Surg.* 1995;12:117-120. doi: 10.1159/000172329. [Cross Ref] | 3. Akkapulu N, Tanrikulu Y. Umbilical Pilonidal Sinus: A Case Report. *J Med Cases.* 2011;2(6):272-4. | 4. Steck WD, Helwing EB. Umbilical granulomas, pilonidal disease and the urachus. *SurgGynecol Obstet.* 1965;120:1043-1057. [PubMed] | 5. 11. Fazeli MS, Lebaschi AH, Adel MG, Kazemeini AR. Evaluation of the outcome of complete sinus excision with reconstruction of the umbilicus in patients with umbilical pilonidal sinus. *World J Surg.* 2008;32:2305-8. [PubMed] | 6. 12. Azzam Al-Kadi, *Int J Health Sci (Qassim).* 2014 Jul; 8(3): 307-310 |