

## CASE REPORT

## UMBILICAL PILONIDAL SINUS

Ghulam Mustafa, Ghulam Akber, Junaid Khan Lodhi, Muhammad Mutahir, Asim Malik

Fatima Memorial Hospital, College of Medicine, Lahore, Pakistan

A pilonidal sinus is a blind-end tract lined with granulation tissue, which leads to a cystic cavity lined with epithelial tissue. As the name suggests, these hair containing abscesses are usually found in the sacro-coccygeal region. However, they may also occasionally occur in the axilla, groin, inter-digital web, umbilicus, nose, inter-mammary areas, supra-pubic area, clitoris, prepuce, penis, occiput, and on the feet. Sinus is caused by the friction of the skin at the base of the spine, leading to the embedding of the hair beneath the surface. The hair forms small cavities or pits, which are in truth, enlarged hair follicles, which go on to become sinuses. Bacteria and debris enter this sterile area, producing local inflammation and formation of pus-filled abscesses. In chronic condition, the sinus becomes an open cavity, constantly draining small amounts of fluid. In this case report we present a case of umbilical pilonidal sinus in a young boy.

**Keywords:** Pilonidal sinus, umbilicus, sinus, omphalectomy.

J Ayub Med Coll Abbottabad 2014;26(1):100-1

## INTRODUCTION

Pilonidal sinus is a combination of two words; *Pilus* means hair and *nidus* means nest.<sup>1</sup> Umbilical pilonidal sinus is a rare entity and not many cases are reported since 1956 when it was first reported by Williams *et al.*<sup>2</sup> It is basically a hair containing cavity presenting either as non-healing and discharging sinus or recurrent abscess formation. It is a common disease of drivers and hair dressers involving the sacro-coccygeal and inter-digital clefts respectively. It can occasionally occur in the axilla, groin, inter-digital web, umbilicus, nose, inter mammary areas, supra-pubic area, clitoris, prepuce, penis, occiput, and on the feet. Aetiology is not clear. Initially it was thought that it was a congenital disease, but higher occurrence of the disease in hair dressers showed its acquired nature.

## CASE

An 18 year old male presented to us with umbilical pilonidal sinus. He was a student and had a hairy body. There was no family history of such disease. Examination revealed a tuft of hair coming out of umbilicus with foul smelling discharge (Figure-1).



**Figure-1: A patient with umbilical pilonidal sinus, with hair and pus coming out of umbilicus**

He was initially managed conservatively by good hygiene, antibiotics and repeated curettage. Regular

follow-up of the patient did not reveal any improvement of the lesion despite good compliance. Hence, patient was counselled about the further treatment options. After taking informed consent omphalectomy (excision of umbilicus) was done. The post-operative period was uneventful. Patient recovered well with resolution of symptoms and the sinus tract.

## DISCUSSION

Umbilical pilonidal sinus is a rare disease compared to Sacro-coccygeal pilonidal sinus, the incidence being 0.6% as reported by Goodall in his study.<sup>3</sup> There are many contributory factors for the development of this disease, e.g., obesity, male gender, tight clothing, deep naval, and poor personal hygiene.<sup>4</sup> There are various methods for the treatment of umbilical pilonidal sinus, ranging from simple hygienic measures, removal of hair, and keeping the umbilicus dry<sup>5</sup> to radical excision of umbilicus.<sup>6</sup>

Kareem in his study documented a total of 134 patients were seen out of which 90.3% were men. 76.19% of patients responded to conservative treatment and rest of 23.8% were retreated by a second session of conservative treatment. Of these 25 patients, 19 (76%) came back for the third visit and only three (15.78%) patients did not respond to the treatment. Hence he concluded that conservative treatment should be regarded as the first choice and the main method of treatment in the management of umbilical pilonidal sinus.<sup>7</sup> Similarly Sarmast *et al* documented favourable results in over 90% of cases with conservative management.<sup>8</sup> Keeping in view good results of conservative measures, we managed our patient conservatively, and when he did not respond to conservative measures surgery with excision of umbilicus.

Other differential diagnosis should also be kept in mind, like urachal cyst can mimic umbilical pilonidal sinus as documented by Abdulwahab *et al.*<sup>9</sup>

Due to possible extension of infection to the peritoneal cavity, such lesions should be dealt with aggressively and properly and conservative measures should be attempted before embarking on radical surgery.<sup>10</sup>

## REFERENCES

1. Hodges RM. Pilonidal sinus. *Boston Med Surg J* 1880;103:485-6.
2. Williams ES, Patey D. Pilonidal Sinus of the umbilicus. *Lancet*. 1956;271:281-2.
3. Goodall P. The etiology and treatment of the pilonidal sinus. *Dig Surg* 1995;12:117-20.
4. Coşkun A, Buluş H, Akıncı OF, Özgönü A. Etiological factors in umbilical pilonidal sinus. *Indian J Surg* 2011;73:54-7.
5. Sadeghi-Nejad H, Rains AJ. Pilonidal sinus of the umbilicus. *Lancet* 1958;271:567-70.
6. McClenathan JM. Umbilical pilonidal sinus. *Can J Surg* 2000;43:225-7.
7. Kareem T. Outcomes of conservative treatment of 134 cases of umbilical pilonidal sinus. *World J Surg*. 2013;37:313-7.
8. Sarmast MH, Javaherizadeh H, Shahvari MR. Non-surgical treatment of umbilical pilonidal sinus in adolescent and adult cases. *Pol Przegl Chir*. 2011;83:652-3
9. Abdulwahab BA, Harste K. Umbilical pilonidal sinus. *Ugeskr Laeger*. 2010;172(41):2848-9.
10. Schoelch SB, Barrett TL. Umbilical pilonidal sinus. *Cutis*. 1998;62(2):83-4

---

## Address for Correspondence:

**Dr. Ghulam Mustafa**, 4/2-A, Al-Bashir Bungalows Apartments, Zaildar Park, Ichhra, Lahore, Pakistan.

**Cell:** +92 321 4125121

**Email:** drgmsial@gmail.com