

# Discharging umbilicus

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## ABSTRACT

**Objective:** Umbilical discharge is a symptom of varied pathology. Treatment policies of this clinical problem vary among different institutions. Our experience in the management of 44 patients with umbilical discharge is presented.

**Methods:** This is a retrospective study of the 44 patients treated at King Khalid University Hospital, Riyadh, Kingdom of Saudi Arabia over a period of 19 years from 1982 to 2001.

**Results:** With the exception of one patient, all patients were treated in the outpatient clinic. General anesthesia was not employed but instead local anesthesia was used in

some cases. One patient required admission for surgical excision, diagnosed to have an ulcerating dermoid cyst. Most patients had hair tuft in the infected umbilicus (pilonidal sinus of umbilicus), 2 patients had concrete like material inside the infected umbilicus.

**Conclusion:** We propose a conservative approach to treat this problem and preserve surgical excision only for selected cases.

**Keywords:** Umbilicus, inflammation, infection, abnormalities, surgery.

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**D**ischarging umbilicus is an uncommon symptom.<sup>1-3</sup> Treatment strategies vary from local conservative treatment to wide excision of umbilicus.<sup>4,5</sup> We do not believe that excision treatment is the treatment of choice for these patients. The purpose of this article is to outline the conservative treatment plan in 44 patients.

**Methods.** From May 1982 to November 2001, data collection was carried out for 44 consecutive patients with a history of chronic umbilical discharge. These were 35 males and 9 females. Six of these were children under the age of 12 years. Complete medical history including job history was obtained from all patients. The treatment policy adopted for these patients, taking into consideration the pathogenesis of the disease, is discussed.

**Surgical technique.** Good fiberoptic light was used, exploration of the umbilicus was carried out using sterile cotton on a stick, with xylocaine spray

10% used in 3 cases. This was followed by removal of hair using non-toothed tissue forceps, and a solution of povidone iodine was prescribed to patients to use twice daily while lying down in supine position and sterile gauze on umbilicus as dressing. Patients' condition was revised one week later to complete the removal of hair or foreign body (FB). Only one patient required a 3rd session of hair removal. Systemic antibiotic was used only in the 2 adult patients associated with infraumbilical cellulites and both responded well to treatment. All infants (4) were admitted, swab for culture and sensitivity was employed and antibiotic was prescribed. Two of the children were treated in the surgical clinic using the same principle of adult treatment but their symptoms and signs were not severe.

**Results.** Thirty-eight out of 44 patients presented with a chronically discharging painful umbilicus for

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a period ranging from 9 to 14 months. The remaining 6 patients (2 adults and 4 children) had acute inflammation of the umbilical area. No enterocutaneous fistulas were seen in this group of patients. Two adult patients suffered acute inflammation with umbilical discharge. The periumbilical area was red, edematous mainly in the infraumbilical area. The umbilicus was painful and pyogenic discharge either spontaneous or by compression was seen in all patients. There was no history of urinary tract infection. No external fistula opening was identified on probing examination of the umbilicus. Hair inside the umbilicus was found in 33 out of 44 patients, polyp was found in 2 patients, dermoid cyst in one patient, concrete like FB with hair in one patient and acute infection and cellulites was found in the remaining patient.

**Discussion.** Umbilical discharge may originate from embryonic anomalies<sup>4,6</sup> or from acquired pathology. In our study, we found no embryonic anomalies but all have acquired pathology. Most of our patients were men and the majority had pilonidal disease of umbilicus<sup>3</sup> (33 patients). All patients received conservative treatment, and surgical excision of umbilicus was not employed in this series. Sroujeh and Dawoud,<sup>5</sup> although they reported the same observations, treated the disease by umbilical excision. This procedure was neither justified nor necessary in our experience. We found our method of treatment to be satisfactory as it is less

invasive and hospitalization was not required, except in the 4 infants.

In conclusion, comparing treatment policy adapted in this study with other modalities of treatment,<sup>1,3,6</sup> we found that surgical excision is neither justified nor necessary for the treatment of umbilicus discharge. Therefore, we recommend conservative treatment to be implemented before considering excisional surgery. By adopting a conservative treatment policy for discharging umbilicus, not only were the symptoms cured, but also the umbilicus was preserved. Furthermore, as the procedure was carried out in the outpatients clinic, it was cost effective. Accordingly, we do not believe that surgical excision of the umbilicus is the treatment of choice for this problem.

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