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Pilonidal Disease of the Umbilicus

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Abstract

Six patients, five males and one female with umbilical pilonidal disease were treated by excision of the umbilicus with a limited safety margin. Inverting skin-to-aponeurosis sutures were used. A rare case of umbilical pilonidal disease with a urachal remnant is described. The condition is not that rare and requires a high index of suspicion for diagnosis.

Introduction

PILONIDAL disease still poses considerable controversy as regards the best way of management. The disease rarely affects the umbilicus and only a few published reports dealt with the condition. The present work represents our experience in such a rare condition.

Patients and Methods

The present work involved six patients with umbilical pilonidal disease. The patients were encountered in two years; 1991, 1992. Two patients were diagnosed in Kasr-El-Aini Hospital and four patients were diagnosed in Hadi Clinic, Kuwait.

The patients were subjected to clinical evaluation and routine laboratory investigations.

Under general anaesthesia and after proper peri-umbilical shaving, excision of the umbilicus containing the pilonidal disease was done in the following manner:

1. An elliptical incision was made above and below the umbilicus with a 1 cm distance superiorly and inferiorly from the latter creating an ellipse with a horizontal axis.
2. The resulting skin ellipse with the umbilicus in the middle is excised down to the aponeurosis taking great care to

excise the granulation tissue of the pilonidal disease leaving healthy tissues behind.

3. The skin edges of the resulting defect are tucked to the aponeurosis by four 2/0 PDS sutures, two for each upper and lower flap of the defect leaving the raw area in the middle to heal by secondary intention.
4. The raw area in the place of the umbilicus is lightly packed with Betadine-impregnated gauze, and the patient is discharged from the hospital on the same day of operation.
5. The Betadine-gauze is changed on alternate days till complete healing of the raw area.

In one female patient, the pilonidal sinus tract was passing inferiorly in the ex-

tra-peritoneal tissue till the urinary bladder in the midline (Fig. 1). The lower skin flap was undermined and the tract was followed till the previously saline-filled urinary bladder and excised.

In all patients, the excised specimens were sent for histopathological examination. The patients were followed-up for one year post-operatively.

Results

The present work involved five male patients and one female patient. The ages of the patients ranged from 20 to 28 years.

The clinical manifestations of the patients are shown in table (1).

The mean healing time, the time required for full coverage of the raw area by fibrous tissue resembling the normal umbilicus was 21.25 days.

Table (1): The Main Presenting Features of the Patients.

Main Clinical Features	No. of Pts	Average Duration of Symptoms
1. Recurrent purulent and/or sanguinous malodorous umbilical discharge, periumbilical redness of the skin and itching	3	One year
2. Localized reddish umbilical swelling containing hairs and granulation tissue (umbilical cyst Fig. 2)	1	6 months
3. An umbilical "mass" of long glistening detached hairs with granulation tissue (Fig. 3)	2	6 months

At one year, there was no recurrence of the disease in any of ten patients.

Histopathological examination revealed the foreign body reaction around the hairs and hair fragments with the characteristic granulation tissue of the sinus.

Discussion

Pilonidal disease of the umbilicus, though a well-known entity, is only rarely reported. Using the "MEDLINE" Computer Service, only 17 patients with umbilical pilonidal disease were reported in the literature during the 15 year period from 1979 till 1993 [1, 2, 3, 4].

Although there is some controversy about the exact pathogenesis of this condition, the consensus of opinion in the published reports is that umbilectomy with excision of a limited safety margin of the skin leaving the wound to heal by secondary intention is the best line of treatment [1, 2, 3, 4].

The resulting scar resembles a normal umbilicus [3].

In none of the published reports was there any use of skin-to-aponeurosis sutures as in the present work. The use of such sutures inverts the skin edges thus rapid healing of the raw area is delayed.



Fig. (1): Umbilical pilonidal sinus with a track coursing down to the urinary bladder (urachal remnant).

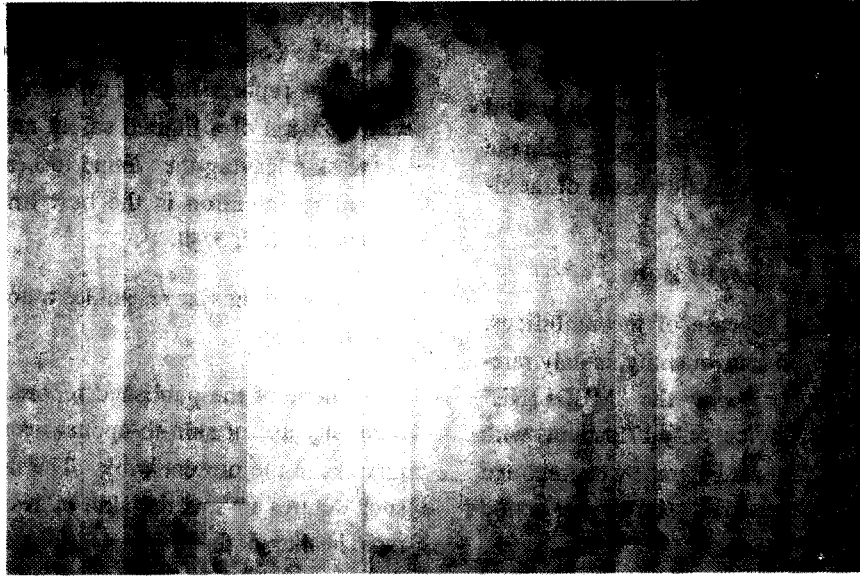


Fig. (2): umbilical cyst.



Fig. (3): Umbilical "mass" of hairs and granulation tissue.

So that future flattening of the scar is prevented and a final inverted puckered scar, more closely resembling a normal umbilicus, is achieved.

In the present work, a female patient aged 20 years presented with a pilonidal sinus of the umbilicus viz a mass of hairs and granulation tissue continuing inferiorly as track ending in the apex of the urinary bladder (Fig. 1), a urachal remnant. One similar case was reported by Gupta with urachal adenoma [2].

The so-called pilonidal cyst encountered in one of our patients is actually a granuloma of hairs and granulation tissue with no epithelial elements in the lining. Therefore, Allen-Mersh [5] prefers the term of pilonidal granuloma for such a condition.

Histopathological examination has been used for documentation and confirmation of the diagnosis. The histological feature are similar to these reported elsewhere [6].

Although extensive literature about the sacrococcygeal sinus exists, pilonidal

disease of the umbilicus probably goes undiagnosed or under reported. The condition is commoner than what appears from the literature requiring higher index of suspicion.

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