



UMBILICAL PILONIDAL SINUS

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ABSTRACT

Most cases of pilonidal sinus occur in the sacrococcygeal region, but umbilical presentations can occur rarely. Due to the risk associated with it of peritoneal extension of inflammation from the lesion, the umbilical pilonidal sinus should be treated more aggressively than its sacrococcygeal counterpart. Pilonidal sinus is a recurrent and chronic inflammatory disorder and should be included in the differential diagnosis of umbilical nodules. We report the case of a 50 year old female with umbilical sinus, managed conservatively.

KEYWORDS: Umbilical sinus, Pilonidal sinus, Umbilical discharge.

INTRODUCTION

Pilonidal sinus is a disease characterized by a granulomatous reaction to a hair shaft penetrating epidermis from the cutaneous surface.^[1] Although it is commonly seen in the sacrococcygeal region, it is also observed in the periumbilical area.^[2] Umbilical pilonidal sinus is quite rare a disease. As such, there is no specific treatment of this disease; many different treatment methods (from conservative modalities to umbilectomy) exist in the literature.^[1, 3-8]

CASE REPORT

A 50 year old Asian female presented with a history of discharge from the umbilicus for past 15 days. The discharge was watery in consistency, non- foul smelling, white colored, sticky in nature, more at night and scanty in amount. Pain was associated with the discharge which was dull in nature, and was relieved on taking medications. She had similar complaints 2 months ago and was treated conservatively with antibiotics for the same and was relieved of the discharge.

She had a past history of tubal ligation 20 years ago. There was no other significant past or family history. On examination, inspection revealed the umbilicus to be centrally located, anteverted. Surrounding skin was normal in colour in peri-umbilical area. Whitish cheesy discharge was seen inside the umbilicus. Hairs were also seen inside the umbilicus. A 1 cm vertical scar mark was seen under the umbilicus correlating with the past history of tubal ligation. There were no dilated veins or pulsations noted. On palpation, there was tenderness and induration in and around umbilicus; there was mild

oedema in the surrounding region. On squeezing, whitish discharge exuded from the sinus. The sinus was fixed to parietes. On per abdominal examination, there was no guarding, rigidity, tenderness, free fluid or lump within the abdomen. Her other systematic examination were normal. Her blood reports showed Hemoglobin 11.7 gm%, urine routine and culture was normal, Random blood sugar: 167 mg/dl; Serum creatinine 0.8 mg/dl, Serum urea 34 mg/dl; Serum total bilirubin 0.3 mg/dl; Serum direct bilirubin 0.1 mg/dl; Serum Alanine Transaminase <10 IU/L. Her serology tested negative for HIV and HBSAg. She was advised CT scan of abdomen and pelvis and it revealed no collection of fluid below the umbilicus and no significant abnormality in abdomen or pelvis. She was treated conservatively with thorough extraction of hairs from inside the umbilical sinus, antibiotics, analgesics and proper umbilical hygienic care.

DISCUSSION

Pilonidal sinus disease is a common surgical disorder. The word, pilonidal, means *nest of hair* and includes the etymological roots (Latin) of *pilus* (a hair) and *nidus* (nest).^[10] The disease generally occurs in the sacrococcygeal region but it also can occur uncommonly in other locations in which an anatomical cleft facilitates the accumulation of hair, including the axilla, between the breasts, the perineum, and the penile shaft, or in spaces between the fingers (in particular, in the case of barbers). 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. An umbilical pilonidal sinus is the rarest variant accounting for only up to 0.6% of cases.^[11]

The clinical features of an umbilical pilonidal sinus are due to inflammation in the sinus. Pain and swelling, as well as a purulent discharge, are the usual symptoms. Some patients may present with an acute abscess. The predisposing factors mentioned in medical literature include hairiness, male gender, a young age, a deep navel, and poor personal hygiene.^[9,12] The differential diagnoses include an umbilical hernia, endometriosis (for women), a Sister Mary Joseph nodule, a pyogenic granuloma, and urachal and epidermoid cysts.^[12,13,14] The diagnosis is usually clinical, by detection of hair nests.^[14] Preoperative intra-abdominal imaging may be required for questionable cases.

Conservative treatment of the disease includes hair extraction on an outpatient basis, improved umbilical hygiene, and instructions on preventive measures. It can be used as first-line therapy for the management of an umbilical pilonidal sinus.^[15] The main cause of failure of conservative treatment is incomplete extraction of the hair from the sinus.^[15,16,17] Sometimes, an incision and drainage of an abscess may be necessary.^[12] For cases that are resistant to conservative management, surgical excision would be the definitive treatment with reconstruction of the umbilicus.^[8] Some surgeons have recommended umbilical excision and wound closure by secondary intention and found the subsequent scar to resemble a normal, depressed umbilicus.^[18]

CONCLUSION

Umbilical pilonidal sinuses are rare diseases and should be included in the differential diagnosis of umbilical discharge and lumps. The initial line of management is conservative but if they keep recurring, surgical treatment with umbilectomy and reconstruction of the umbilicus should be done.

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