Pilonidal Fistula-in-ano

P Shankar, P Haray

Citation

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Abstract

A Pilonidal sinus is a blind-end tract lined with granulation tissue, which leads to a cystic cavity with usually dead hair in it. The commonest situation is in the postnatal region. Very rarely the Pilonidal sinus may communicate with the anal canal forming a Pilonidal fistula in ano. The causation of these fistulae is unclear. Here we present one such case of Pilonidal sinus which had complex fistulous connections to the anal canal.

INTRODUCTION

A Pilonidal sinus is a blind-end tract lined with granulation tissue, which leads to a cystic cavity lined with epithelial tissue enclosed by the adjacent tissue. It is generally regarded as an acquired disorder although the pits through which hairs enter the subcutaneous tissue may be congenital.

Most pilonidal sinuses occur in the postanal region but they may be found in the axilla, the groin, the interdigital web and on the feet and occiput[1].

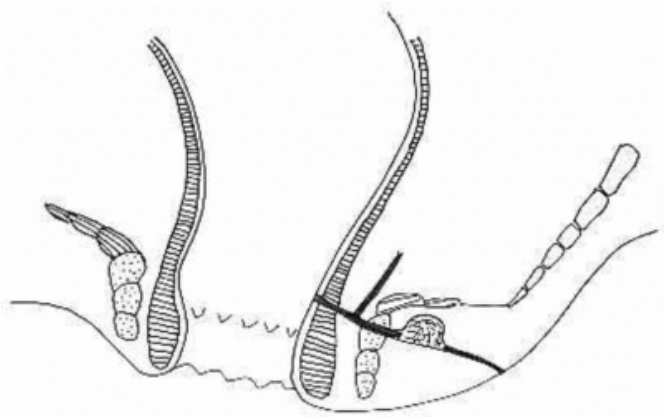
A Pilonidal Fistula-in-ano is extremely uncommon and a thorough search of the literature has shown that only six such cases have previously been reported[2]. Here we present a case of a perianal pilonidal cyst which had a complex fistulous connection to the anal canal. There was a primary tract opening into the anal canal above the dentate line and a secondary tract running superiorly to the supralevator region.

CASE REPORT

A forty-eight year old man presented with a nine month history of a chronically discharging sinus in the post-sacral region and history of passing flatus through the opening. There were no other associated symptoms. Clinical examination showed a discharging sinus in the post-sacral region. Rectal examination and procto-sigmoidoscopy revealed an internal opening in the posterior wall of the anal canal just above the dentate line. Colonoscopy showed no evidence of inflammatory bowel disease. Barium enema showed a fistulous tract arising from the anorectum, tracking backwards to the pre-sacral space, displacing the rectum anteriorly. He was further investigated by magnetic resonance imaging which showed a fistulous tract with an internal opening above the dentate line , which traversed transphinterically to the external opening. There was also a secondary tract which passed superiorly across the levator muscle(Fig 1).

Figure 1

Figure 1: A Pilonidal sinus with a primary fistulous tract opening into the anal canal above the dentate line and a secondary tract extending above the levator ani



In view of the complexity of the fistula, a two stage procedure was performed. An endoanal partial thickness flap advancement was carried out under cover of a defunctioning loop colostomy which was subsequently reversed. Wide excision of the external fistulous tract was also carried out. To our surprise, dead hair was seen within the depths of the tract and histology of the specimen confirmed the diagnosis of a pilonidal sinus.

DISCUSSION

In 1880, Hodges coined the term Pilonidal sinus for the condition which was described by Warren as hair cysts in 1854[3]. Pilonidal sinuses are classically situated in the natal cleft overlying the sacral and coccygeal areas. It was

originally thought to be of congenital origin but is now widely regarded as acquired and this theory is based on the formation of a sinus by penetration of the skin by hair[4].

In 1970 Lord[5] reported an interesting case of a Pilonidal sinus which was initially referred to as a fistula in ano but closer inspection showed a tiny pit in the natal cleft which was joined by a track to an opening near the anus. It was an understandable error as there was no communication to the anal canal.

Vallance[6] in 1982 similarly reported four cases of Pilonidal fistulae which were initially diagnosed as fistulae-in-ano. In these cases there were perianal and perineal openings which initially appeared to be anal fistulae but, on examination, had no communication to the anal canal. These openings had interconnecting tracts to a pilonidal sinus in the natal cleft.

Pilonidal sinuses which open through a primary communication into the anal canal are extremely uncommon and only six such cases have been reported in the literature.

Weston and Schlachter[7] reported the first case of Pilonidal cyst of the anal canal. They speculated that hair may have entered the cyst through the floor of an anal fissure following which infection and epithelialisation occurred. Wilson et al[8] presented a case with multiple sinuses of which two opened into the lower anal canal and contained hair.

Interestingly Walsh and Mann[9] have reported three cases of endoanal Pilonidal sinuses, in which there were distinct hair containing cavities lying partly in the intersphincteric plane opening through a track into the anal canal. Accarpio et al[2] reported a case of Pilonidal cyst in the usual location(presacral area) but it had a fistulous tract inside the anal canal.

Our case was unique in that there was a Pilonidal cyst with a bundle of hairs in the presacral area, which had a complex fistulous connection to the anal canal. There was a primary tract which traversed transphincterically to open into the anal canal above the dentate line and there was also a secondary track running superiorly into the levator region. It is difficult to ascertain whether Pilonidal fistula-in-ano is a primary lesion or secondary to implantation of hair in a previous cutaneous defect. It is possible that in our case dead hair may have entered through the external opening of a previously existent fistula in ano. Alternatively, a cryptoglandular abscess could have established a communication with an existing pilonidal sinus.

CONCLUSION

True Pilonidal fistulae-in-ano are extremely uncommon. Inspite of using modern diagnostic modalities, these lesions often do not become evident until surgery. The success of the repair depends on total eradication of all the primary and secondary tracts.

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Author Information

Paramaguru J Shankar, Mr
Research Fellow, Department of Surgery, Clinical Research, Research

Puthucode N Haray, Professor
Professor of Surgery, Consultant, Department of Coloproctology and Surgery