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A case report of endoanal pilonidal sinus

Abdulwahid M. Salih, F. H. Kakamad

ABSTRACT

Introduction: Pilonidal sinus is a disease in which chronic inflammatory condition occurs due to involution of hair fragments into the skin. Endoanal pilonidal sinus is an extremely rare condition with only 10 cases have been reported in literature. We present a case of endoanal pilonidal sinus with literature review. Case Report: A 39-year-old male with perianal discharge and itching for six months duration. Clinical examination showed an external opening at 11 o'clock. Fistulectomy was performed. The histopathological examination confirmed endoanal pilonidal sinus. Conclusion: Although extremely rare, pilonidal sinus may occur in the anal canal, especially in those patients with previous operation. Fistulectomy with open tract is an effective treatment.

Keywords: Endoanal pilonidal sinus, Hair containing sinus, Pilonidal fistula, Pilonidal sinus

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INTRODUCTION

Pilonidal sinus is a common medical problem that accounts for about 15% of anal suppurations [1]. It is a condition with chronic inflammation associated with the involution of hair into the skin. It occurs commonly in the sacrococcygeal area [2]. However, it may also occur in other areas rarely like umbilicus, nose, suprapubic area, groin, interdigital web, axilla, clitoris, prepuce, or penis [3]. The onset of pilonidal sinus is rare before puberty and beyond the age of forty [4]. It occurs three times more in male than female [4]. It clinically presents as mass, pain, cellulitis and redness [5].

Endoanal pilonidal sinus is an extremely rare condition with only 10 cases have been reported in literatures [6–11]. Although previous anal operation accounts for etiology of some cases, its exact cause remains unknown [11]. We present a case of endoanal pilonidal sinus with literature review.

CASE REPORT

A 39-year-old male with history of surgically treated pilonidal sinus and anal fistula before two years, presented with perianal discharge and itching for six months duration associated with pain especially during

defecation. Clinical examination showed an external opening at 11 o'clock about 3.5 cm distant from anal verge with indurations and surrounding skin excoriation. Transperineal ultrasonography revealed single fistula tract extending proximally into the anal canal and merging with its wall about 16 millimeters from anal verge. The sonographer concluded intersphincteric, low type, fistula-in-ano. Under spinal anesthesia, fistulectomy was performed, the tract left open. The histopathological examination showed chronic inflammation containing scattered foreign body, multinucleated giant cells centered on a tract which was lined by thick benign stratified squamous epithelium and contained several free hair shafts, features of endoanal pilonidal sinus (Figure 1). After five weeks of follow-up, patient was comfortable and free on symptoms.

DISCUSSION

The origin of pilonidal disease is not well understood. There are two theories for its pathogenesis: congenital and acquired theories. However, the majority of opinion favors the acquired theory [12]. In general, at least three conditions should be present for a pilonidal sinus to develop: First is hair in the skin. Second, some sort of wrinkled skin, like the natal cleft or a scar. The third condition is a mixture of hormonal and hygienic problem [13]. It usually presents as pain, local inflammation and redness [5].

Endoanal pilonidal sinus which was previously called pilonidal fistula, is a pilonidal sinus with an opening into anal canal [14]. There are several ways for sinus to be driven into the anal canal:

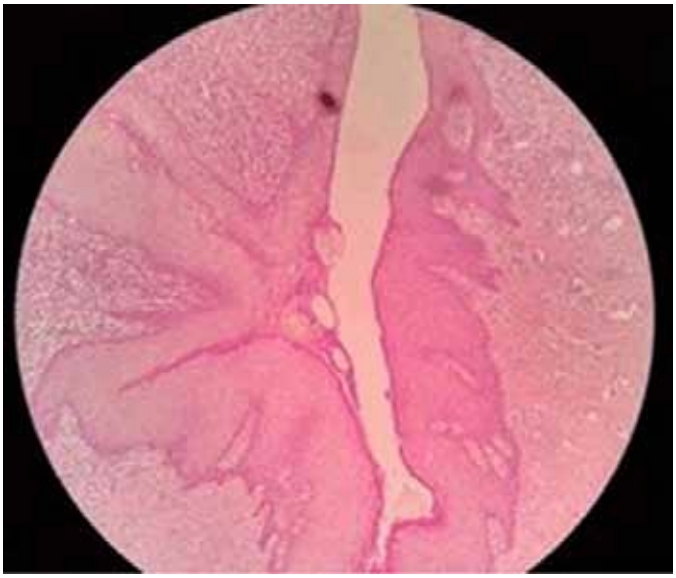

Figure 1: Microscopic examination showed chronic inflammation containing scattered foreign body, multinucleated giant cells centered on the tract confirming pilonidal sinus.

- Spread of sacrococcygeal pilonidal diseases into the perianal area.
- Less known theories are that the pilonidal cysts reach through the penetration of hairs into an open anal fissures or that hairs can get into the anal canal as they do in other areas of the body.
- The most updated theory regards the acquired condition after anal operation in which hairs may penetrate the underlining tissues through the healing wound or via developing scar [11].

The main presenting features of the endoanal pilonidal sinus are discharge, inching and pain. Surgical fistulectomy with primary repair is the corner stone of the management. To our knowledge, there are only 10 reported cases in literatures. Nine of them occurred in male and one occurred in a woman. The age range of the patients was 23–58 years. Eight of them presented with recurrent purulent discharge. Two of the cases were symptomless and they were accidentally found during a surgical intervention to manage hemorrhoids. None of the reported patients had found hairs in the anal canal by themselves. As in this case, the sinus was singular in nine of them while other patient had double endoanal sinuses. Regarding the surgical intervention, in five cases the cyst and the tracts were opened and left for secondary intention healing and on the other four cases the lesion was thoroughly removed. Two of the reported cases had the same initial presentation as ours. All three patients were initially surgically diagnosed as cases of anal fistula. While others diagnosed as pilonidal sinus initially. Later on during surgical correction and histopathological examination, they were fount that to be cases of endoanal fistula [6–11].

CONCLUSION

Although extremely rare, pilonidal sinus may occur in the anal canal. The main risk factor is previous anal operation. Fistulectomy with open tract appears to be a good treatment option for healing with a very low rate of recurrence.

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Author Contributions

Abdulwahid M. Salih – Substantial contributions to conception and design, Acquisition of data, Analysis and interpretation of data, Drafting the article, Revising it critically for important intellectual content, Final approval of the version to be published

F. H. Kakamad – Analysis and interpretation of data, Revising it critically for important intellectual content, Final approval of the version to be published

Guarantor

The corresponding author is the guarantor of submission.

Conflict of Interest

Authors declare no conflict of interest.

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