De Novo Intra-Anal Pilonidal Sinus: A Case Report

Dr Nampally GattuSwamy †
DNB General Surgery Resident, Hindu Rao Hospital & NDMC Medical College, New Delhi, India

Dr Govind Madhav † 
DNB General Surgery, FMAS, FIAGES, Department of General Surgery, Hindu Rao Hospital & NDMC Medical College, New Delhi, India

Dr Ratna Chopra
MS General Surgery, HOD, Department of General Surgery, Hindu Rao Hospital & NDMC Medical College, New Delhi, India

Dr Meet Naresh Jajal †
DNB General Surgery Resident, Hindu Rao Hospital & NDMC Medical College, New Delhi, India

† indicates co-first author

Abstract

Pilonidal sinus is a disease in which chronic inflammation occurs due to involution of hair fragments into skin. Intra-anal pilonidal sinus is extremely rare condition and only 10 cases have been reported in literature, where most of them had previous history of anal or pilonidal sinus surgery. A 22 years’ male presented with the complaints of purulent discharge per rectum and itching around peri anal region on and off for 3 months. No history of previous peri anal surgery or pilonidal surgery. Proctoscopy revealed opening of sinus at 6’o clock position. Intra operatively sinus tract laid open and tuft hair was removed and cavity curetted. His post operative period was uneventful.

Introduction

The name pilonidal sinus was first described by Hodges in 1880. Pilonidal derived from Latin-pilus means “hair” and nidus means “nest”. It is defined as a granulomatous lesion with dense hair, usually located on the sacrum (natal cleft) in young hairy people [1]. Diagnosis may be confused with anal fistula or hidradenitis suppurativa [2]. However it may occur in other areas like umbilicus, nose, suprapubic area, groin, interdigital web space, axilla, clitoris and prepuce [3]. Intra anal pilonidal sinus is extremely rare condition with just 10 cases reported in literature [4-9]. Although previous anal surgery accounts for etiology of most of cases, it’s exact cause is unknown [10].

There are several ways for sinus to be driven into the anal canal:

• 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 underlying tissues through the healing wound or via developing scar [4].

We are presenting a case of de-novo intra-anal pilonidal sinus without any previous history of any anal surgery.

Case Report

A 22 years old gentleman presented with the complaints of recurrent pus discharge with itching for 3 months. On regional examination, no external opening seen in perianal region with normal natal cleft. Digital rectal examination was essentially normal with induration at 6 o’clock. On Proctoscopy-a pin point opening seen at 6’o clock position with bluish black discoloration and (Intra anal) 2-2.5cm from anal verge. No history of any previous anal surgery. MRI demonstrated hyperintense lesion on T2 and hypointense lesion on T1 with size of 2X2 cm in the posterior wall of anal canal. Patient was worked up for
surgery. On surgical exploration, a sinus opening with tuft of dead hair at 6’o clock position in the anal canal 2-2.5cm from anal verge without any pus collection noted. The tract was laid open and the wall cavity was curetted, washed with saline solution and sample was sent for histopathological examination. The cavity was blunt and not involving internal or external sphincter. The wound was left for secondary healing. After 3 weeks, granulation was completed. Histopathological examination showed chronic inflammatory changes with dead hair, without any hair follicles. After that he had no recurrence/complaints.

Discussion
Pilonidal sinus typically develops in the space of natal cleft in young hairy people. Intra-anal pilonidal sinus is a rare entity and its origin is not well understood [11]. There are two theories for its pathogenesis: congenital and acquired theories. However the majority of opinion favors the acquired theory [12]. In general, it is associated with 3 pre requisite conditions like hairy skin, some sort of wrinkled skin and mixture of hormonal and poor hygiene [13]. Intra anal 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: (1) Spread of sacrococcygeal pilonidal diseases into the perianal area. (2) 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. (3) 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 [4].

The main presenting features of intra anal pilonidal sinus are discharge per rectum, itching, pain. 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 had previous anal or perianal surgery and 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. The sinus was singular in nine of them with external opening, while other patient had double endoanal sinuses. Regarding the surgical intervention out of ten cases, in five cases the cyst and the tracts were opened and left for secondary intention healing and on the other five cases the lesion was thoroughly removed [4-9].

Conclusion
In case of intranal sinuses without any previous perianal surgeries, denovo pilonidal sinus must be kept as a possible diagnosis.

References