

**PILONIDAL SINUS IN THE PERIANAL AREA: DIAGNOSIS AND THERAPEUTIC IMPLICATIONS**

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**ABSTRACT**

The pilonidal sinus or cyst in the perianal area is a rare presentation of a common pathology. Pilonidal sinus is usually arising in the region of natal cleft, only less than 20 cases have been reported in the perianal area. This unusual localization of pilonidal sinus may pose a differential diagnosis challenge mainly with anal fistula and hidradenitis suppurativa. It may also have specific therapeutic implications linked to localization. We report a case of perianal pilonidal sinus in a 23-year-old young man who was admitted for treatment of anal fistula, it was only intraoperatively that the pilonidal sinus was diagnosed. Some technical devices are provided to remove the diagnostic doubt and apply the appropriate treatment. The surgical excision was performed and the patient has a good recovery.

**KEYWORDS:** pilonidal sinus, perianal area, differential diagnosis.**INTRODUCTION**

Pilonidal sinus in the perianal area (PSPA) is very rare in the literature worldwide and the few published cases are often initially confused with anal fistula. It is defined as an acute or chronic infection in the subcutaneous fatty tissue, mainly in the natal cleft (sacroccocygeal region).<sup>[1,2]</sup> We report a new case of this exceptional localization of pilonidal sinus and we raise the diagnostic elements as well as the therapeutic particularities in the light of literature data.

**CASE REPORT**

A 23-year-old man, with no significant pathological history, was admitted in our surgical department for intermittent painful swelling and purulent perianal discharge for more than two years. Physical examination reveals a perianal fistulous orifice at 3 o'clock with an indurated subcutaneous path leading to the sphincter system, pus discharge on bidigital compression. The wrong diagnosis of anal fistula was made and the patient was scheduled for surgical treatment. Peroperatively, the exploration with air and methylene blue did not find the primary orifice of the fistula. In fact, the fistulous trajectory was blind, arriving in contact with the internal sphincter and had no connection with the lumen of the anal canal (Fig.1). After its partial section in-depth, a pile of hairs was found in its lumen (Fig. 2) and the diagnosis of pilonidal sinus was finally established. Surgical excision was performed followed by skin closure in outpatient surgery. The patient had an uneventful postoperative recovery.



**Fig. 1:** Intraoperative view showing dissection of the perianal pilonidal sinus, the trajectory is similar to that of anal fistula.



**Fig. 2: Surgical specimen showing hair in the lumen of pilonidal sinus after its partial section.**

### DISCUSSION

Pilonidal disease is an acquired mechanical pathology of the hair follicles. It is the consequence of the acute or chronic infection of the subcutaneous fatty tissue following a penetration of the hairs in the dermis, but the pathogenesis of this penetration remains unclear.<sup>[2,3]</sup> Significant hairiness, obesity and friction are the most important contributing factors of this disease.<sup>[1,2,4]</sup> The most frequent localization concerns the sacrococcygeal area or natal cleft (hence the old name of sacrococcygeal cyst) and affects mainly young adults with a male predominance in 75% of cases.<sup>[4]</sup> In this localization, the diagnosis is often obvious, it is generally a sinus containing hair and draining suppuration.<sup>[2,4]</sup> But in the perianal region, this affection poses a diagnostic challenge particularly with anal fistula or hidradenitis suppurativa, and may not be evoked in the initial differential diagnosis. It should be noted that other rare localizations have been described in the literature (cheek, umbilicus, scrotum, penis, etc).<sup>[5,6]</sup> Regardless of location, the treatment for pilonidal sinus is simple incision or surgical excision under local or locoregional anesthesia. Other minimally invasive techniques were described with a higher recurrence rate than excisional methods.<sup>[2,5]</sup> However, PSPA may have specific therapeutic implications related to its anatomical location. Not recognized preoperatively, the proctologist may wrongly apply the anal fistula treatment with all its implications. Indeed, he will strive to find the primary orifice of the so-called fistula and paradoxically the iatrogenic anal fistula is born. Faced with diagnostic doubt, the difficulty in locating the primary orifice or in tunneling the path of the anal fistula, the PSPA must be evoked. We propose a simple technique to prevent this surgical embarrassment and keep the simplicity of this

pathology when it is suspected in the perianal region. A dissection of the cutaneous and subcutaneous path of the sinus or of the fistula is performed with an electric scalpel by pulling lightly on the fibrous tissue, then, partial sections are made at different levels of the path by scissors in search of hairs piled up in its lumen (Fig. 2). At this time, the diagnosis is clarified and the surgical intervention can be continued depending on the founded pathology.

### CONCLUSION

Although it is a rare occurrence in clinical practice, the perianal pilonidal sinus should be considered as a differential diagnosis of any fistulized perianal lesion. Its precise diagnosis makes it possible to avoid false therapeutic choices.

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