



Pilonidal disease: Gaps in the guidelines and future perspectives

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INTRODUCTION

Pilonidal disease (PD) is an increasingly common condition that predominantly affects the young population. The variety of treatment modalities described in the literature makes it nearly impossible to design a study capable of definitively identifying the optimal method. As a result, treatment strategies are broadly categorized into minimally invasive and excisional approaches, with the choice often tailored to the severity and complexity of the disease on an individual basis.

Currently, four major guidelines and consensus reports have been published on PD: The American (1), German (2), and Italian (3) guidelines, as well as the most recent guideline from the European Society of Coloproctology (ESCP) (4) in 2024. While these guidelines share certain points of agreement, they also diverge on several issues, and most of their recommendations are based on expert opinion or very low levels of evidence. Furthermore, many questions frequently encountered by surgeons in daily practice are either not addressed or remain unanswered in these guidelines.

Here, we explore some of these critical gaps:

Disease Classification and Treatment Options

The only meta-analysis on classification, by Beal et al. (5), concluded that none of the eight existing classification systems can be recommended for routine use, as none have been validated in large series or compared with each other. These systems differ in their consideration of disease presentation, recurrence, anatomical location, and patient-related factors. Current guidelines generally divide PD into “simple” and “complex” categories, with treatment options determined accordingly. However, the criteria for distinguishing between simple and complex disease are left to the surgeon’s subjective assessment.

Among available evidence, the ESCP guideline provides the most practical treatment algorithm: minimally invasive techniques for simple disease, and excisional procedures for complex cases (4). For defining simple versus complex disease, Tezel’s (6) navicular area classification offers a useful framework: Simple disease is limited to the navicular area with minimal extension, while complex disease extends beyond this area or represents persistent/recurrent PD. Both classification and management of PD remain areas in need of further research. Surgeons should utilize at least one of the existing classification systems to document and evaluate their outcomes, thereby contributing to future validation studies.

Management of Acute Abscess and the Need for Definitive Treatment

For abscesses, incision and drainage are the primary treatments regardless of location. However, in PD, clinical practice varies widely. The optimal site for

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drainage is debated: One study found that midline drainage led to delayed healing and advocated for lateral incisions (7), while others argue that midline approaches directly target the disease. Some surgeons recommend enlarging existing pits or connecting them. In Türkiye, the common practice is to drain from the point of maximal fluctuation (8). Needle aspiration is another controversial approach; one study reported 90% healing with needle aspiration and antibiotics (9). Neither the Italian nor German guidelines specify details regarding the site or technique of drainage (2,3). Until higher-level evidence emerges, the ESCP guideline's recommendation appears most reasonable: Drainage and debridement via a lateral incision large enough to allow proper cleaning of the cavity (4).

All guidelines advocate for definitive treatment after acute inflammation heals (1-4). This is largely based on a meta-analysis by Stauffer et al. (10), which reported a 40% recurrence rate at 60 months post-drainage. However, a national audit from the Netherlands found only a 9% recurrence rate at 12 months, challenging the necessity of elective surgery for all patients (11). Notably, Stauffer et al.'s (10) meta-analysis showed that 60% of patients healed with drainage alone. Given these findings, the need for elective surgery in asymptomatic patients post-drainage is questionable. Moreover, minimally invasive interventions such as unroofing, phenol application, and EPSIT are increasingly performed during abscess drainage with a simultaneous curative intent (8), further complicating the issue. All classification systems define patients without symptoms as asymptomatic PD, for which no guideline recommends intervention (5). I believe that treatment, especially excisional surgery should not be performed unless symptoms recur.

Hair Removal

The Italian guideline recommends epilation for patients with dense hair, but does not specify how to assess hair density, when to begin hair removal, how long to continue, or which methods to use (3). The ESCP guideline states that pre- and postoperative hair removal does not affect recurrence (4). Electron microscopy studies by Doll's group (12) have shown that hairs isolated from pilonidal cysts are often transported from other parts of the body—most commonly the occipital region. Both a meta-analysis (13) and a review (14) have reported a reduced recurrence with laser depilation, though this recommendation has not yet been incorporated into guidelines. Another study found that individuals with denser body hair are more prone to hair entrapment in the natal cleft, which may explain the relationship between hair density and PD risk (15). Given these findings, regular hygiene measures—such as cleaning the natal cleft, daily showers, and especially showering after haircuts—are advisable. Laser epilation may help reduce hair and debris entrapment, but further studies are needed before it can be routinely recommended. More research is required to clarify

the impact of hair removal practices commonly used in clinical practice.

Postoperative Wound Care and Activity Restrictions

There are no specific guideline recommendations regarding wound care or dressing after either minimally invasive or excisional treatment for PD, nor are there prospective studies addressing these issues. In practice, some surgeons advise avoiding water contact after excisional procedures, particularly when drains are present, while others recommend daily showers. Although there is no direct evidence for PD, wound care protocols for other body regions may be applicable: dressings for the first two days until epithelialization, followed by daily showers. After minimally invasive procedures, daily showers and covering the area with gauze until discharge ceases may be appropriate. More research on postoperative wound care for PD is needed.

There is also no data regarding restrictions on sitting or sleeping positions after excisional procedures. Some surgeons restrict sitting after flap procedures, encourage supine positioning to reduce seroma formation, or recommend prone positioning to protect flap circulation. This area requires further study. My personal view is that there is no need to restrict sitting or sleeping positions, but patients should avoid cycling and high-impact sports (such as football or basketball) that may increase the risk of falls.

CONCLUSION

Current guidelines on PD do not provide clear recommendations regarding classification, acute abscess management, hair removal, or postoperative care. Considering the high prevalence of this disease especially in Türkiye, and its increasing incidence worldwide, future scientific studies should focus on addressing these conflicting and unresolved issues.

Keywords: Pilonidal disease, proctology, abscess

Footnotes

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