

Surgical Treatment of Uncomplicated Pilonidal Sinus with the Simple Closed Technique - New Findings of Pilonidal Sinus Treatment from Albania

Marius Dettmer ^{1*}, Dietrich Doll ², Matthias Maak ³

Received: 11 February 2023 / Accepted: 06 March 2023 / Published online: 20 January 2024

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Abstract

This Letter to the Editor presents novel findings from Albania regarding the surgical treatment of uncomplicated pilonidal sinus using a simple closed technique. Pilonidal sinus disease remains challenging, and this correspondence introduces a new perspective on managing this common surgical issue.

The letter discusses the rationale behind adopting the simple closed technique, highlighting its efficacy and potential advantages. By presenting data from our experiences in Albania, we aim to contribute valuable insights to the global discourse on pilonidal sinus treatment.

This letter is a noteworthy addition to AJTES, offering fresh insights into the treatment landscape of pilonidal sinus. The editorial team will find the content aligned with the journal's objectives and scope.

Our consideration of this submission is highly appreciated, and we look forward to contributing to the journal's ongoing dialogue on innovative surgical approaches.

Keywords: Pilonidal Sinus, Surgical Treatment, Closed Technique, critically discuss

Dear Editor,

Concerning the article of Bollano E et al., "Surgical treatment of uncomplicated Pilonidal Sinus with a simple closed technique," has been gathering our attention. [1]. We would like to critically discuss some of the author's statements in this LTE. Firstly, the stated pathophysiology of PSD needs to be updated. Furthermore, as postulated by the author, primary midline closure is not the surgical

procedure of first choice, as several extensive reviews have shown.

Reporting about 60 patients over four years in Albania, he described results and complications from the "simple closed" technique. To our knowledge, this is the first paper from Albania about Pilonidal Sinus Disease, and it would be exciting to have more information about the incidence of pilonidal sinus in Albania.

Nevertheless, there are some comments that we would like to make concerning some statements the author is making. Firstly, he proposes that the pathology of pilonidal sinus is the infection of hair follicles due to the occlusion of the fatty glands and sweat. This is an old theory dating back to *Hueston T.J. et al.* from 1953, who proposed folliculitis as the culprit of pilonidal sinus disease.[2] This theory has long been overcome; it has been shown that pilonidal sinus patients sweat less than average patients.[3]

In 2017, *Gosselink M. and Ctercteko G.* depicted on electron microscopy how hair pierces into the skin if the scale direction is outright. [4, 5]

Bosche F. et al. could show that the pilonidal nest contains mainly rootless short hair fragments of mostly less than 1 cm in length, which pierce into the skin.[6] These hairs have been falling from the head into the intergluteal crest. [7]

Original article, no submission or publication in advance or in parallel

**** Corresponding author:***

Matthias Maak, MD, PhD

✉ matthias.maak@kreiskrankenhaus-hoechststadt.de

- 1 Department of Trauma Surgery and Orthopaedics, Reconstructive and Hand Surgery and Burn Medicine, German Armed Forces Central Hospital Koblenz, Koblenz, GERMANY
- 2 Department of Procto-Surgery and Pilonidal Sinus, St. Marienhospital Vechta, Academic Teaching Hospital of the MHH Hannover, Vechta, GERMANY
- 3 Department of Surgery, Friedrich-Alexander University (FAU) Erlangen-Nuremberg and Universitätsklinikum Erlangen, Erlangen, GERMANY.

Forensic biology studies from the Munich police concluded that this hair is most likely occipital. [8] Bayesian odds calculations (a statistical approach to compare the likelihoods of a hypothesis) came to the same opinion. [8]

Not surprisingly, short hair fragments can be found immediately after visiting the hairdresser despite using everyday gown protection. [7] These short hair fragments with sharp ends can pierce into the skin if they reach the intergluteal crest, being drilled into the skin through gluteal movements. Trauma is not a common origin of pilonidal sinus. [9] Males are four times more blighted with this disease than females; this ratio seems stable despite the rising incidence of pilonidal sinus disease. [10,11]

The author rightly uses methylene blue, as this can reduce the recurrence rate in pilonidal sinus disease. [12] Nevertheless, we question why the author uses the “simple close” midline technique. Stauffer VK et al. have shown that midline closure is the method with the highest recurrence rate, Field [13], which is not stated in Bollano’s work and cannot be detected either because the recurrence rate is a function of time.

However, even studies from Al-Khamis and others, which the author is citing, propagate leaving the midline closure method because of the associated high recurrence rate and high complication rate, with the latter being experienced by the author’s patients.[14]

Conclusion:

We kindly asked the author to give us more numbers on the incidence of pilonidal sinus in Albania, which would be very interesting for the scientific community.

Funding: No funding or grants from any other funding agencies in the public, commercial, or not-for-profit sectors were received.

Category: Letter to the Editor

Communication: The paper is not based on a previous communication to a society or meeting

Data availability statements: Data sharing does not apply to this article as no datasets were generated or analyzed during the current study.

Disclosure statement: All authors declare that they have no conflicts of interest. No relevant or minor financial relationships exist between relatives, next of kin, and external companies.

References

- Bollano, E., Lilaj, K., & Thereska, D. (2023). Surgical Treatment of uncomplicated Pilonidal Sinus with the simple Closed Technique. *Albanian Journal of Trauma and Emergency Surgery*, 7(1), 1196-1199. <https://doi.org/10.32391/ajtes.v7i1.324>
- Hueston JT. The aetiology of pilonidal sinuses. *Br J Surg*. 1953;41(167):307–11.
- Doll D, Brengelmann I, Schober P, Ommer A, Bosche F, Papalois AE, et al. Rethinking the causes of pilonidal sinus disease: a matched cohort study. *Sci Rep*. 2021;11(1):1-7.
- Gosselink M, Ctercteko G. The role of hair in the pathogenesis of pilonidal disease. *ESCP Teachings - Pilonidal Sinus* [Internet]. 2017 2018; 12. Available from: <https://www.escp.eu.com/news/focus-on/pilonidal-disease/1550-the-role-of-hair-in-the-pathogenesis-of-pilonidal-disease-martijn-gosselink-and-grahame-ctercteko>.
- Gosselink MP, Jenkins L, Toh JWT, Cvejic M, Kettle E, Boadle RA, et al. Scanning electron microscope imaging of pilonidal disease. *Tech Coloproctol*. 2017;21(11):905-6.
- Bosche F, Luedi MM, van der Zypen D, Moersdorf P, Krapohl B, Doll D. The Hair in the Sinus: Sharp-Ended Rootless Head Hair Fragments can be Found in Large Amounts in Pilonidal Sinus Nests. *World J Surg*. 2018;42(2):567-73.
- Doll D, Wilhelm D, Ommer A, Albers K, Mordhorst H, Iesalniaks I, et al. Immediate cut hair translocation to the intergluteal fold in the hairdressers shop – another link to pilonidal sinus disease. *PSJ*. 2019;5(1):23-32.
- Doll D, Bosche F, Hauser A, Moersdorf P, Sinicina I, Grunwald J, et al. The presence of occipital hair in the pilonidal sinus cavity-a triple approach to proof. *IJCD*. 2018;33(5):567-76.
- Doll D, Petersen S. Letter: Trauma is not a common origin of pilonidal sinus. *Dermatol Surg*. 2008;34(2):283-4.
- Luedi MM, Schober P, Stauffer VK, Diekmann M, Anderegg L, Doll D. Gender-specific prevalence of pilonidal sinus disease over time: A systematic review and meta-analysis. *ANZ J Surg*. 2021;91(7-8):1582-7.
- Luedi MM, Schober P, Stauffer VK, Diekmann M, Doll D. Global Gender Differences in Pilonidal Sinus Disease: A Random-Effects Meta-Analysis. *World J Surg*. 2020;44(11):3702–9.
- Doll D, Novotny A, Rothe R, Kristiansen JE, Wietelmann K, Boulesteix A-L, et al. Methylene Blue halves the long-term recurrence rate in acute pilonidal sinus disease. *International journal of colorectal disease*. 2008;23(2):181-7.
- Stauffer VK, Luedi MM, Kauf P, Schmid M, Diekmann M, Wieferrich K, et al. Common surgical procedures in pilonidal sinus disease: A meta-analysis, merged data analysis, and comprehensive study on recurrence. *Sci Rep*. 2018;8(1):3058.
- Al-Khamis A, McCallum I, King PM, Bruce J. Healing by primary versus secondary intention after surgical treatment for pilonidal sinus. *Cochrane Database Syst Rev*. 2010(1): CD006213.