Early View Article: Online published version of an accepted article before publication in the final form.

Journal Name: International Journal of Case Reports and Images (IJCRI)

Type of Article: Case Report

Title: A Case Report of Scalp Pilonidal Sinus with Literature Review

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doi: To be assigned

Early view version published: December 31, 2015


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Short Running Title: scalp pilonidal sinus

Guarantor of Submission: The corresponding author is the guarantor of submission.
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ABSTRACT

Introduction
Pilonidal sinus is a chronic inflammatory condition which includes penetration of hair fragments into the skin. It rarely occurs in areas other than sacrococcygeal region.

Case Report
A 19-year-old male, presented with pilonidal sinus of the posterior part left temporal area of the scalp for 1 year duration treated by complete excision and primary repair.

Conclusion
Although extremely rare, pilonidal sinus may occur in the scalp with unknown etiology.

Keywords: scalp, Pilonidal Sinus, sinus, hair containing sinus.
INTRODUCTION

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

Scalp pilonidal sinus is an extremely rare condition with only 7 reported cases in literatures. Although trauma accounts for etiology of some cases, its exact cause remains unknown [2,6,7]. We present a case of scalp pilonidal sinus with literature review.

CASE REPORT

A 19 -year-old male presented with a chronic nodule in the scalp for 1 year duration with intermittent discharge. There was no history of trauma. Local examination showed a single mobile nodule, 2x2cm in size in the left parieto-occipital region with a punctum in center. Complete blood count, erythrocyte sedimentation rate and skull X-ray were normal. Complete excision of the nodule was performed under local anaesthesia. Primary closure was done after irrigating the wound with diluted povidone. Histopathological examinations showed skin and subcutaneous tissue of scalp containing a sinus tract in the center infiltrated by mixed inflammatory cells, associated with foreign body giant cell reaction which contained hair particles. The wound showed clear margins after 3 months of the operation (Figure 1).

DISCUSSION

Pilonidal sinus refers to any subcutaneous sinus which contains hair [2]. It is a blind-end tract lined with granulation tissue, which leads to a cystic cavity lined with epithelial tissue [3]. The origin of pilonidal disease is not well understood. There are
two theories associated with its pathogenesis: the acquired and the congenital theories. However, the majority of opinion favors the acquired theory [8,9]. In general, at least three conditions need to be fulfilled for a pilonidal sinus to develop: First is hair in the skin and, second, some kind of wrinkled skin, such as the natal cleft or a scar. The third condition is a mixture of hormonal and hygienic problem [7]. It usually presents as pain, local inflammation and redness [5]. Treatment for symptomatic pilonidal sinus involves surgery to incise and drain the abscess. The surgery can be either wide excision and healing by secondary intention (longer healing time, low chance of recurrence), excision and primary closure by sutures (quicker healing, high risk of recurrence), or plastic surgical technique (for recurring and/or extensive sinus). The other procedures include topical application of natural polyphenols/laser epilation [3].

Scalp pilonidal sinus is a rare variant of pilonidal sinus. In most cases it’s etiology remains unknown [2,6,7,10]. In some reported cases, trauma was accounted for the etiology by their authors [11,12,13]. Our patient did not report head trauma. Pilonidal sinus typically occurs in the sacrococcygeal area [2]. However, it may appear in other areas like axilla, groin, interdigital web, umbilicus, nose, suprapubic area, clitoris, prepuce, or penis [3]. Scalp pilonidal sinus is very rare. Table 1 shows scalp pilonidal sinus literature review with localization and proposed etiology.

CONCLUSION

Although extremely rare, pilonidal sinus may occur in the scalp. Its etiology remains unknown. It can be excised and primarily sutured using local anaesthesia.

CONFLICT OF INTEREST

None to be declared

AUTHOR’S CONTRIBUTIONS

Abdulwahid M. Salih: The surgeon who performed the operation and did follow up.

Fahmi H. Kakamad: wrote the manuscript and did follow up.
REFERENCES


2. Balasaheb A. et al. Pilonidal sinus over a rare site. IJSR. Volume : 4 | Issue : 2 | February 2015 • ISSN No 2277 - 8179


Table 1: Literature review of pilonidal sinuses of scalp with their localization

<table>
<thead>
<tr>
<th>Reference no.</th>
<th>Author’s</th>
<th>Year</th>
<th>Age, Gender</th>
<th>Localization</th>
<th>Aetiology</th>
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<td>Chiu MW et al</td>
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<td>70, F</td>
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<td>10-</td>
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<td>6-</td>
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<td>20, M</td>
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<tr>
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<td>Present case</td>
<td>2015</td>
<td>19, M</td>
<td>Left posterior temporal region</td>
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FIGURE LEGENDS

Figure 1: Three months after excision and primary closure of the scalp pilonidal sinus

Figure 2: Histological confirmation of the scalp pilonidal sinus

FIGURES

Figure 1: Three months after excision and primary closure of the scalp pilonidal sinus
Figure 2: Histological confirmation of the scalp pilonidal sinus