Recurrent Interdigital Pilonidal Sinus in a Dog Groomer

Lauren Shikowitz-Behr¹ Alan M. Freedman¹

¹ Division of Plastic and Reconstructive Surgery, Northwell Health System, Hofstra North Shore-LIJ School of Medicine, New Hyde Park, New York, United States

Address for correspondence Lauren Shikowitz-Behr, MD, Division of Plastic and Reconstructive Surgery, 1991 Marcus Avenue, New Hyde Park, NY 11042, United States (e-mail: lauren.shikowitz@gmail.com).

J Hand Microsurg 2016;8:113–114.

Diseases of the hand are frequently evaluated and treated by plastic surgeons and hand surgeons. Still on occasion, a diagnostic dilemma may arise. Pilonidal sinus disease of the web spaces of the hand is an atypical presentation of an otherwise common disorder. It routinely affects the sacrococcygeal area, and is commonly diagnosed and treated by medical and surgical specialists outside of the fields of plastic and hand surgery. There is, however, a subset of patients whose occupations put them at increased risk for pilonidal sinus disease of the interdigital spaces, and thus it is imperative that hand surgeons consider this diagnosis as part of the differential, and be aware of treatment options.

In this instance, a 24-year-old man, working as a dog groomer, presented to the plastic surgeon's office complaining of pain and irritation at the second web space of his right hand. Physical examination revealed a 0.8 cm abscess, for which he was treated with incision and drainage, and completed a course of oral antibiotics. The patient presented again, 4 weeks later, with a recurrent abscess at the same location. Excision and primary closure was performed, this time removing a wedge of skin containing two short animal hairs (► **Fig. 1**). The pathology report noted a cystic follicle with surrounding fibrosis and focal hemosiderin, consistent with diagnosis of pilonidal sinus disease. There was no further disease recurrence.

Pilonidal sinus disease typically arises in the sacrococcygeal area. However, the literature describes instances of disease on the scalp, neck, axilla, abdomen, suprapubic region, penis, groin, and in the interdigital spaces.¹ Interdigital disease, while diagnosed rather infrequently, is considered to be an occupational disease of those handling short, coarse hairs. It is most commonly encountered in barbers, but also reported in dog groomers, sheep shearers, and cow milkers.² The first documented case of a barber's interdigital pilonidal sinus was reported in 1942, and described a foreign body granuloma in reaction to a male client's embedded hairs.³ It is postulated that trauma, likely from the repetitive

use of the hand as a comb-like device, causes these coarse hairs to penetrate the skin of the interdigital crease, subsequently leading to a foreign body reaction, chronic inflammation, and sinus tract formation.⁴

Pilonidal sinus disease of the web spaces of the hand is sparsely mentioned in the plastic surgery literature. It is likely that this entity is underreported, misdiagnosed, and subsequently mistreated. The diagnosis of pilonidal sinus disease should be considered during the clinical evaluation of interdigital abscesses, especially in patients whose occupations were noted previously. Improper diagnosis and mistreatment may portend a poor outcome, as treatment with incision and drainage alone could lead to disease recurrence. This patient's presentation demonstrates that proper recognition of

Fig. 1 Surgical specimen; wedge of soft tissue excised from the second web space.

received
April 23, 2016
accepted
May 11, 2016
published online
July 21, 2016

© 2016 Society of Indian Hand & Microsurgeons

DOI <http://dx.doi.org/10.1055/s-0036-1585469>.
ISSN 0974-3227.

interdigital pilonidal sinus disease followed by surgical excision of the sinus tract and complete removal of the foreign body is critical for a cure.

Conflict of Interest

None.

Funding

None.

References

- 1 Sion-Vardy N, Osyntsov L, Cagnano E, Osyntsov A, Vardy D, Benharroch D. Unexpected location of pilonidal sinuses. *Clin Exp Dermatol* 2009;34(8):e599–e601
- 2 Papa CA, Ramsey ML, Tyler WB. Interdigital pilonidal sinus in a dog groomer. *J Am Acad Dermatol* 2002;47(5, Suppl):S281–S282
- 3 Patel M, Malaviya G. Chronic Infections. In: Wolfe S, Hotchkiss R, Penderson W, Kozin S, eds. *Green's Operative Hand Surgery*. Philadelphia, PA: Elsevier Churchill Livingstone; 2011: 86–139
- 4 Eryilmaz R, Okan I, Ozkan OV, Somay A, Ensari CÖ, Sahin M. Interdigital pilonidal sinus: a case report and literature review. *Dermatol Surg* 2012;38(8):1400–1403