Case Report

DOI: https://dx.doi.org/10.18203/2349-2902.isj20205909

Intermammary pilonidal sinus: rare location of a common condition

Gayatri A. Deshpande*, Raj N. Gajbhiye, Bhupesh Tirpude, Hemant Bhanarkar, Vikrant Akulwar, Girish Kodape

Department of General Surgery, Government Medical College, Nagpur, Maharashtra, India

Received: 11 June 2020 Revised: 30 July 2020 Accepted: 05 December 2020

*Correspondence:

Dr. Gayatri A. Deshpande,

E-mail: gayatrisabne@rediffmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Pilonidal sinus in the intermammary region is a rare location of an inflammatory condition commonly occurring in the natal cleft. It is typically characterised by a pus and hair containing cavity in the skin lined by granulation tissue connecting the skin surface. A 22 year-old female presented with chronically discharging sinuses in the intermammary region with recurrent abscess formation for one year duration. Although a rare location, clinical diagnosis of pilonidal sinus was made. Complete excision of sinus tract with abscess cavity with primary closure was performed under general anaesthesia. Histopathological examination confirmed pilonidal sinus. On follow up, the scar was healthy with no keloid formation. Pilonidal sinus may rarely occur in intermammary region. Complete excision and primary closure is the mainstay treatment.

Keywords: Intermammary pilonidal sinus, Pilonidal abscess, Chronic discharging sinus

INTRODUCTION

Pilonidal sinus (PNS) is a common inflammatory condition caused by penetration of hair into the epidermis of the skin. It is characterized by a pus and hair containing cavity in the skin lined by granulation tissue. It typically presents as a chronic discharging sinus with recurrent abscess formation. Typically PNS occurs in the natal cleft. Rarely, it affects other areas of the body like groin, axilla, umbilicus, interdigital web, suprapubic area, nose, clitoris, prepuce, penis, or occiput. Intermammary pilonidal sinus is an extremely rare condition with very few cases reported in literature. Ye describe the case of a 22 year old female with a pilonidal sinus in the intermammary region.

CASE REPORT

A 22 years old female presented with a chronic discharging sinus in the intermammary region since one year. She was previously misdiagnosed and treated as recurrent fungal infection. But her symptoms persisted. The local

examination revealed multiple discharging sinus in the intermammary region. Her X-ray, erythrocytic sedimentation rate (ESR) and Mantoux test were normal, thus ruling out tuberculosis. She underwent complete excision of sinus tracts with primary closure under general anaesthesia.



Figure 1: Mass as demonstrated on physical examination.



Figure 2: Scar after excision and primary closure.

Histopathology revealed pilonidal sinus tract with acute on chronic inflammation. The patient underwent laser epilation of the chest wall to prevent recurrence. She was also advised silicone dressing for prevention of keloid formation. On follow up, the scar was healthy with no keloid formation after six months.

DISCUSSION

The word "pilonidal" is derived from the Latin words pilus ("hair") and nidus ("nest"). Ever since its first report in 1833, pilonidal disease has always been in controversy with regards to its aetiology. However, the most accepted aetiology is that of an acquired pathology with multiple contributing factors. It is still unknown whether hair (either loose or native to the region) are the primary cause or whether the hair follicles become infected leading to microabscesses and PNS.⁸

The commonest location of pilonidal sinus is the natal cleft. 97.8% of pilonidal sinus are seen in the sacrococcygeal region and intermammary location is extremely rare.⁹

Sacrococcygeal pilonidal sinus is a common disorder among young hairy adults, of age group from 15-30 years, with a 3:1 male-to-female ratio. However, intermammary pilonidal sinus is seen mostly in young obese females with bulky breast.⁷ It has been proposed that tight brassiers increase the pressure in the intermammamary region and enhance skin penetration by hair.

The pilonidal sinus typically presents as chronic discharging sinus with recurrent abscess formation. In the intermammary region, a few other conditions may mimic the clinical picture like hidradenitis suppurativa, pyoderma gangrenosum, syphilis or tuberculosis. ¹⁰

It was reported that hairiness is among the most important risk factor for developing PNS. However, this risk factor has not been mentioned in case of an intermammary PNS.⁷

The most commonly used treatment modality for typical PNS is surgery which classically includes local excision. Depending upon the presence of contamination the wound is either left to heal by secondary intention or a primary closure is done. Post-operative wound complications are known leading to increased morbidity. Another alternative for wound closure is the use of local flaps. However, flap may not be required for closure in case of intermammary PNS due to the presence of lax skin in that region which can be mobilised for cover.⁷

Non-surgical therapies described for PNS include phenol injection or topical polyphenols. ^{11,12} Laser epilation as primary treatment for PNS have also been tried with promising results. ^{13,14} The new technique with excision and tension-free primary closure using fibrin glue in order to obliterate the dead space and to promote wound healing has also been described. ¹⁵ However, for intermammary PNS, excision with primary closure remains the mainstay of treatment. ⁷

CONCLUSION

Intermammary pilonidal sinus is a relatively rare presentation of a common condition. Complete excision with primary closure is the mainstay of treatment. Due precaution for prevention of keloid formation is mandatory for excellent cosmetic results especially in young females.

Funding: No funding sources Conflict of interest: None declared Ethical approval: Not required

REFERENCES

- Oueidat D, Rizkallah A, Dirani M, Assi T, Shams A, Jurjus A. 25 years' experience in the management of pilonidal sinus disease. Open J Gastroenterol. 2014;4:1-5.
- Sunkara A, Wagh D, Harode S. Intermammary pilonidal sinus. Int J Trichol. 2010;2(2):116-8.
- 3. Yavalkar P, Shelke R. Intermammary Pilonidal Sinus: A Case Report. Ind J Med Case Rep. 2014;3(2).
- 4. Lion-Cachet J. Inter-mammary pilonidal sinus. S Afr J Surg. 1971;9(3):141-2.
- 5. Richardson HC. Intermammary pilonidal sinus. Br J Clin Pract. 1994;48(4):221-2.
- 6. Demiralay E, Höbek A, Altaca G. Inter-mammary pilonidal sinus; an extremely rare location: case report. BTDMJB. 2009;5(2):78-9.
- 7. Shareefa SH, Hawramia TA. Intermammary pilonidal sinus: The first case series. Int J Surg Case Rep. 2017;41:265-8.
- 8. Chintapatla S, Safarani N, Kumar S, Haboubi N. Sacrococcygeal pilonidal sinus: historical review, pathological insight and surgical options. Tech Coloproctol. 2003;7(1):3-8.
- 9. Ciftci F, Abdurrahman I. A different disease: extrasacro-coccygeal pilonidal sinuses etiopathogenesis. Int J Clin Exp Med. 2015;8(7):11567-71.

- Gupta PJ. Pilonidal sinus disease and tuberculosis.
 Eur Rev Med Pharmacol Sci. 2012;16(1):19-24.
- 11. Baqir QK. The role of phenol injection in the treatment of pilonidal sinus disease. Bas J Surg. 2009;15:78-80.
- 12. Aksoy HM, Aksoy B, Egeme D. Effectiveness of topical use of natural polyphenols for treatment of sacroccygeal pilonidal sinus disease: aretrospective study including 192 patients. Eur J Dermatol. 2010;20(4):476-81.
- 13. Abbas O, Sidani M, RubeizN, Ghosn S, Kibbi AG. Letter. 755-nm Alexandrite laser epilation as an adjuvant and primary treatment for Pilonidal sinus disease. Dermatol Surg. 2010;36:430-2.
- 14. Anthony V, Benedetto A, Lewis AT. Pilonidal sinus disease treated by depilation using an 800 nm diode laser and review of the literature. Dermatol Surg. 2005;31(5):587.
- 15. Greenberg R, Kashtan H, Skornik Y, Werbin N. Treatment of pilonidal sinus disease using fibrin glue as a sealant. Tech Coloproctol. 2004;8(2):95.

Cite this article as: Deshpande GA, Gajbhiye RN, Tirpude B, Bhanarkar H, Akulwar V, Kodape G. Intermammary pilonidal sinus: rare location of a common condition. Int Surg J 2021;8:385-7.