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A Misdiagnosed Tinea

[1]Dr. Krupa Ajmera, Junior resident in Department of Dermatology, Venerology and Leprosy, D.Y Patil Hospital, Nerul, Navi Mumbai, Maharashtra

[2]Dr. Aastha Menon, Junior resident in Department of Dermatology, Venerology and Leprosy, D.Y Patil Hospital, Nerul, Navi Mumbai, Mahasrashtra

[3]Dr. Aswathy Radhakrishnan, Junior resident in Department of Dermatology, Venerology and Leprosy, D.Y Patil Hospital, Nerul, Navi Mumbai, Mahasrashtra

[4]Dr. Nitin J. Nadkarni, Professor of dermatology, Department of Dermatology, Venerology and Leprosy, D.Y Patil Hospital, Nerul, Navi Mumbai, Mahasrashtra

[5]Dr. Sharmila Patil, Professor and Head of Department of Dermatology, Venerology and Leprosy, D.Y Patil Hospital, Nerul, Navi Mumbai, Mahasrashtra

[6]Dr. Kiran Godse, Professor of dermatology, Department of Dermatology, Venerology and Leprosy, D.Y Patil Hospital, Nerul, Navi Mumbai, Mahasrashtra

Corresponding Author: Dr. Aastha Menon, Junior resident in Department of Dermatology, Venerology and Leprosy, D.Y Patil Hospital, Nerul, Navi Mumbai, Mahasrashtra

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Abstract

Groin eruptions have got a varied etiology. In today's age, the commonest diagnosis is Tinea Cruris and, sometimes, a dermatologist errs on the side of commonness and ignores rare conditions which can cause groin eruptions. Hailey-Hailey disease is one of the rare mimickers of Tinea Cruris.

We report this case due to its rarity and common misdiagnosis with Tinea Cruris.

Keywords: Tinea Cruris, Hailey-Hailey disease, groin eruptions

Introduction

Groin eruptions have got a varied etiology. In today's age, the commonest diagnosis is Tinea Cruris and, sometimes, a dermatologist errs on the side of commonness and ignores rare conditions which can cause groin eruptions. Hailey-Hailey disease is one of the rare mimickers of Tinea Cruris.

We report this case due to its rarity and common misdiagnosis with Tinea Cruris.

Case Report

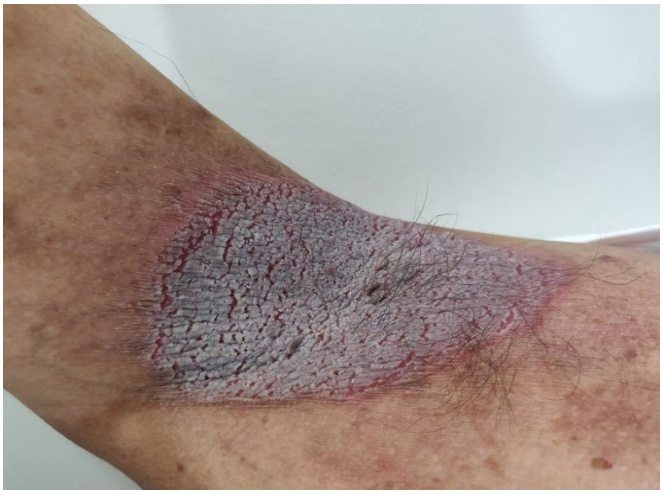
My patient, a28 year old male, residing in Nerul, came with chief complaints ofred itchy foul smelling lesions in flexures since many years.

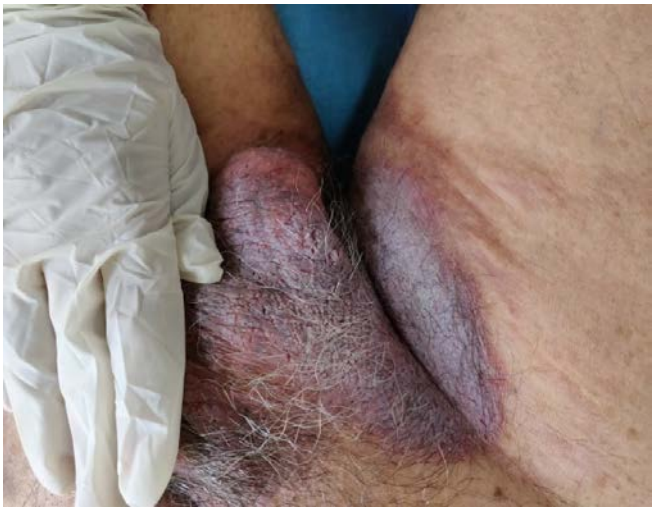
There was history of occasional blisters. Patient had visited many doctors and was treated with many anti-fungal therapies with no response. Similar history was

noticed in the patient's father and some other male family members.

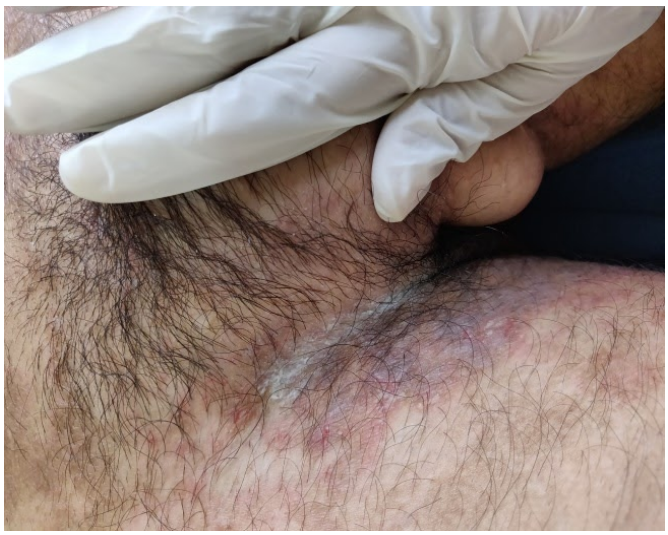
On examination, both father and son had erythematous plaques, with fissures and flaccid bullae in both axillae, groins and perianal area. There were a few areas with scaling. Scalp, oral cavity and face were spared.

Father: Male, 55 years old





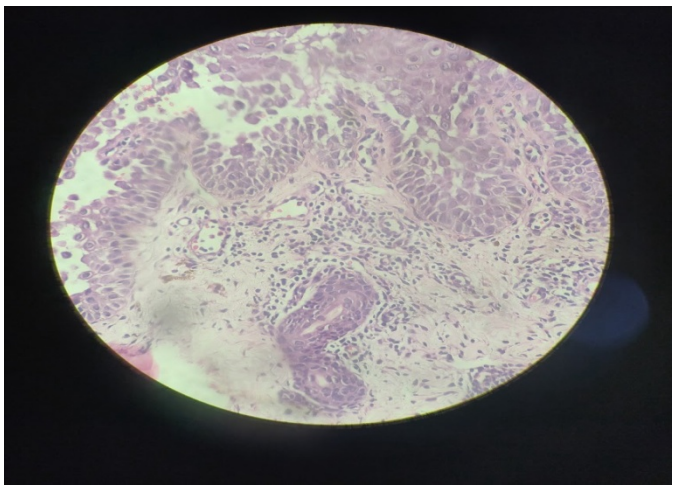
Son: Male,28years old

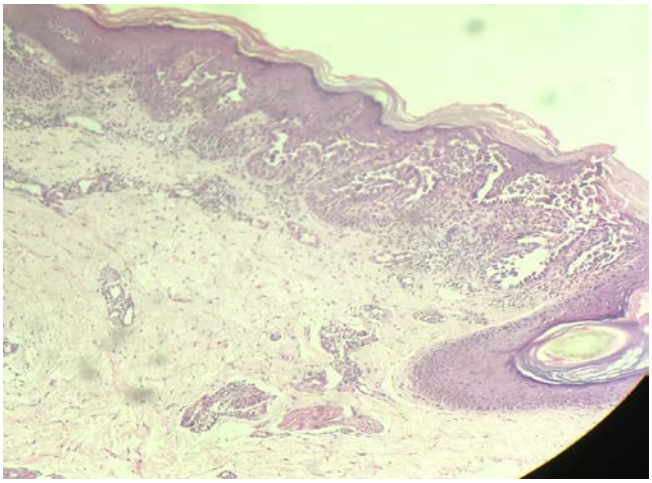


- Routine examination including skin scrapings for fungi, chest X-ray and complete haematological check-up did not reveal any abnormality in both the patients.
- G6PD was negative for both patients.
- Differential diagnosis-(i)Tinea cruris
  (ii)Hailey-Hailey disease

  A provisional diagnosis of Hailey-Hailey disease with associated Tinea Cruris was made.

On Biopsy





Histopathology shows

- Supra-basal cleft with stratified squamous epithelium
- Epidermis shows acantholysis
- Dilapidated brick wall appearance
- Neutrophilic infiltrate

Hence, diagnosis of Hailey-Hailey disease was confirmed.

Result

- The father was started on CapsuleDoxycycline 100mg twice a day, and topicalBeclo-methasone cream twice daily, with a good response.
- The son was started on TabletDapsone 100mg once daily, Tablet Prednisolone 30mg once daily, and Mometasone + Fusidic acid cream twice daily, with major resolution of symptoms.

Discussion

Hailey-Hailey disease, also known as familial benign chronic pemphigus, was first discovered by the Hailey brothers in 1939. The prevalence of Hailey–Hailey disease is 1:50,000. It is an autosomal dominant disorder caused due to mutation in ATP2C1 gene. The gene encodes an adenosine triphosphate–powered calcium pump in the Golgi apparatus of epidermal cells. Defective calcium transport results in abnormal adhesion of keratinocytes and subsequent acantholysis, likely triggered by shear stress of the epidermis. It is characterized by recurrent, fragile vesicles and erosions in intertriginous areas, viz. axillary folds, groins, sub-mammary regions, and neck folds. Skin lesions most commonly present between the second to fourth decades of life and these lesions can be pruritic, painful, and malodorous. Recurrent lesions may lead to restricted mobility. Hailey-Hailey disease has a chronic, relapsing-remitting course and can be exacerbated by friction, heat, sweating, constrictive clothing, physical trauma, infection, and stress. Hailey-Hailey disease is a rare disease that may be difficult to distinguish from other intertriginous diseases. Due to increased prevalence of resistant tinea infection, any lesion in the intertriginous area is first treated with anti-fungal therapy. Hence, rare disorders are often missed and the patient suffers enormous discomfort. There are many similarities between fungal infection and Hailey-Hailey disease, as both of them occur in the intertriginous areas. In both the above referred patients, flare up was seen with sweating, similar history was seen in other male members of the family, macerated plaques were seen in both. Hailey-Hailey disease usually starts with vesicles and bullae. However, fungal infection usually does not show fluid-filled lesion except in Id eruption. Hailey-Hailey diseasewill give a long-standing history. Hence,Hailey-Hailey disease should be considered in patients with recurrent flares of intertriginous lesions. Diagnosis is more difficult if a super-imposed bacterial and fungal infection is present. A fungal infection, such as intertriginous candidiasis, may present clinically by the presence of satellite lesions with peripheral papules and pustules. A potassium hydroxide stain will help to

confirm the diagnosis, but care should be taken as a superimposed fungal infection can lead to misdiagnosis, by masking the underlying Hailey-Hailey disease. These lesions are prone to bacterial or fungal infections such as Candida. Biopsy and clinical features (such as longitudinal leukonychia) can help distinguish this disease. While there is no known cure, individualized treatments using a combination of anti-microbials and steroids are important to decrease patient morbidity, reduce flares, and limit complications. It is important to differentiate other bacterial and fungal infection which can superimpose the lesion. Wood's lamp examination can help to distinguish a pseudomonal infection from cutaneous Erythrasma, caused by Corynebacteriumminutissimum. Pseudomonas fluoresces green under Wood's light, while Corynebacteriumminutissimum fluoresces as coral-red patches with well-defined borders. Tinea Corporis typically presents clinically by the appearance of a raised and annular active border of pustules or vesicles with either central scale (in early lesions) or central clearing (in advanced lesions). Tinea Cruris may appear similar, aswell-demarcated erythematous plaques with central clearing and elevated scaling borders that may be active with pustules or vesicles, and may be confirmed by KOH examination.

Conclusion

Every lesion in the groin area is not Tinea Cruris. Hence, the likelihood of rare disorders such as Hailey-Hailey disease should be borne in mind. In India, most of the patients go to general physicians for common problems. Hence, more awareness should be created amongst them to treat these patients early, so as to avoid unnecessary discomfort and prevent anti-fungal resistance.

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