



Short Communication

HAILEY-HAILEY DISEASE: AN AUTOSOMAL GENETIC DISORDER

Supriya Sharma*¹, Kanchan Srivastava², Priyanka Gaur³ and Shalini Gupta⁴

¹Dept. of Oral Pathology and Microbiology, Faculty of Dental Sciences, King George's Medical University, UP, Lucknow

²Dept. of Respiratory Medicine, King George's Medical University (KGMU), UP, Lucknow

³Dept. of Physiology, King George's Medical University (KGMU), UP, Lucknow

⁴Dept. of Oral Pathology and Microbiology, Faculty of Dental Sciences, King George's Medical University, UP, Lucknow

ARTICLE INFO

Article History:

Received 12th March, 2018

Received in revised form 24th

April, 2018 Accepted 5th May, 2018

Published online 28th June, 2018

Key words:

Hailey-Hailey disease, Autosomal dominant, Familial benign chronic pemphigus, Skin disease.

ABSTRACT

Hailey-Hailey disease (HHD), also termed as familial benign chronic pemphigus, is a rare autosomal dominant blistering skin disease with waxing and waning in its clinical course. It is described by the presence of flaccid vesiculo-pustules, crusted erosions or expanding plaques in the areas of friction such as neck, axilla, groins, and perineum. Histopathologically exhibits suprabasal separations, inconspicuous dyskeratosis, acantholytic cells within the epidermis, giving a dilapidated brick wall appearance. This article impart about the clinical and histopathological features of HHD and various differential diagnosis for this disease.

Copyright©2018 Supriya Sharma et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

Hailey-Hailey Disease (HHD) is an uncommon autosomal dominant Genodermatosis characterized by the development of flexural erosions, blisters, and warty papules.¹ It is also termed as Familial benign Pemphigus or familial benign chronic Pemphigus was originally described by Hailey brothers in 1933. Approximately two-thirds of patients have a family history of the disorder. A history of various relapses and remissions is typical. There are so many hypotheses exist concerning the pathogenesis of familial benign Pemphigus.² It is considered to consequence from a genetic defect in a calcium pump protein. The pump mutation is in *ATP2CI*, a gene bounded on chromosome.³ The genetic defect in Darier disease, which is a calcium pump defect, is also similar to this gene defect. In addition to the primary gene defect in HHD, contributing factors like heat, friction, and infection are known to exacerbate the disease.³

The disease first manifests itself during adolescence or young adult life, although there are occasional exceptions. There is no apparent predilection for occurrence in either gender. The lesions themselves develop as small groups of vesicles appearing on normal or erythematous skin, which soon rupture to leave eroded, crusted areas. These lesions then appear to enlarge peripherally but heal in the center.

*Corresponding author: Supriya Sharma

Dept. of Oral Pathology and Microbiology, Faculty of Dental Sciences, King George's Medical University, UP, Lucknow

Nikolsky's sign may be present.⁴ Nikolsky's sign is a clinical dermatological sign, named after Russian physician Pyotr Nikolsky (1858–1940). (The sign is formed after slight rubbing of the skin results in exfoliation of the outermost layer). It has been frequently noted that heat and sweating simplify the outbreak of the lesions while spontaneous remissions may occur in cold weather. The lesions themselves develop most commonly on those areas of skin which are exposed to friction, e.g. flexure surfaces of the axillae, groin, the neck and the genital area. Tender and enlarged regional lymph nodes may also be present.¹

It has been recognized that bacterial infection also appears to precipitate the appearance of lesions, and more recently, infection by *Candida albicans* has been implicated.³

Oral lesions occasionally occur in patients with familial benign chronic Pemphigus and mimicking to those occurring on the skin. The lesions develop as crops of vesicles which rapidly rupture leaving raw corroded areas.¹

The histological appearance of the epithelial lesions in familial benign chronic Pemphigus bears remarkable similarity to that seen in Pemphigus vulgaris and in keratosis follicularis or Darier's disease. Histopathological examination from the biopsy specimen revealed hyperkeratosis and acanthosis with a subcorneal bulla showing intraepidermal clefting and acantholytic cells giving a dilapidated brick wall appearance, which was consistent with the diagnosis of Hailey Hailey disease (HHD). Although the classic presentation and nail findings made the diagnosis straightforward in few cases,

dermoscopy can be a useful clue in the diagnosis of HHD when faced with an intertriginous rash.¹ Other differentials of HHD include sub corneal pustular dermatoses (SCPD), Pustular psoriasis, Intertrigo, Pemphigus vulgaris, Darier's disease, Fungal infections, Acanthosis nigricans, Pemphigus vegetans and Galli Galli disease.^{1,3} More studies are required in this area to delineate the dermoscopic differences of these disorders.¹

Currently an effective result of Minocycline hydrochloride has been reported in a case of HHD.⁵ Familial benign Pemphigus waxes and wanes in intensity. Soothing compresses (Aluminum acetate) succeed by intermittent application of topical antibiotics (Clindamycin or erythromycin) and mild corticosteroid preparations results in transient improvement. Erythromycin, Tetracycline and Methotrexate are favored. Bacterial culture and sensitivity may assist guide appropriate therapy.³

References

1. Chauhan P, Meena D, Hazarika N.2018. Dermoscopy of Hailey Hailey disease. *Indian Dermatol Online J.*, 9:139-40.
2. Luo S, Ni H, Li Y, Hou S, Li X, Liu Q.2011. Novel clinical and molecular findings in Chinese families with Hailey-Hailey disease. *Clin Exp Dermatol.*, 36: 814-816.
3. D'Errico A, Bonciani D, Bonciolini V, Verdelli A, Antiga E, Fabbri P, Caproni M. 2012. Hailey-Hailey disease treated with methotrexate. *J Dermatol Case Rep.*,2:49-51.
4. PV Nikolski. Materiali K.uchenigu o pemphigus foliaceus [doctoral thesis]. Kiev. 1896.
5. Kono M, Niizawa M, Takeichi T, Muro Y, Akiyama M .2018. Hailey-Hailey disease due to ATP2C1 splice site mutation, successfully treated with minocycline hydrochloride. *JEADV.*, 32:1-40.

How to cite this article:

Supriya Sharma *et al* (2018) 'Hailey-Hailey Disease: An Autosomal Genetic Disorder', *International Journal of Current Advanced Research*, 07(6), pp. 13804-13805. DOI: <http://dx.doi.org/10.24327/ijcar.2018.13805.2479>
