ASIAN JOURNAL OF PHARMACEUTICAL AND CLINICAL RESEARCH

INNOVARE ACADEMIC SCIENCES
Knowledge to Innovation

Vol 15, Issue 11, 2022

Online - 2455-3891
Print - 0974-2441

Case Report

ACROKERATOSIS VERUCIFORMIS OF HOPF CLINICALLY MIMICKING AS NECROLYTIC ACRAL ERYTHEMA

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Received: 09 May 2022, Revised and Accepted: 25 July 2022

ABSTRACT

Acrokeratosis verruciformis is very rare genodermatosis that was originally described by Hopf in 1931. A 29-years-old male presented to skin outpatient department with brown-colored hyperkeratotic plaques on dorsum of both feet that clinically mimicked as necrolytic acral erythema in our case. Biopsy was taken from lesion that shows hyperkeratosis, acanthosis, and slight papillomatosis along with well-circumscribed elevation of epidermis resembling church spires. No dyskeratotic cells were seen.

Keywords:

 DOI: http://dx.doi.org/10.22159/ajpcr.2022v15i11.45152. Journal homepage: https://innovareacademics.in/journals/index.php/ajpcr

INTRODUCTION

Acrokeratosis verruciformis (AKV) is disorder of keratinization in which multiple flat–topped skin-colored keratotic lesions resembling plane warts are seen on dorsum of hands and feet. AKV of Hopf most commonly develops during early childhood but occasionally develops as late as fifth decade [1]. It exhibits autosomal dominant pattern and shows incomplete penetrance. Because of this, there may not always be family history positive. We present a case of AKV of Hopf clinically mimicking necrolytic acral erythema in which well-defined dusky erythematous eruption with marked hyperkeratosis and red rim around it is seen.

CASE REPORT

A 29-year-old man presented to skin outpatient department with brown-colored hyperkeratotic plaque on dorsal aspect of both feet for 2 years (Fig. 1). No specific family history present. There was no history of any drug intake or any other medical history. Biopsy was taken from the lesion and keeping necrolytic acral erythema as differential.

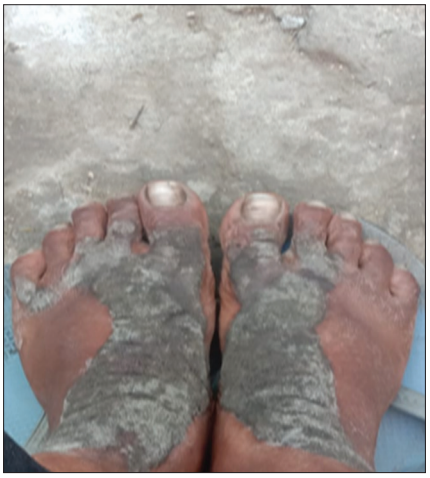

Fig. 1:

Biopsy of the lesion – shows hyperkeratosis, acanthosis, and slight papillomatosis along with circumscribed elevation of epidermis resembling church spires. Focal elongation of rete ridges and cup like central depression of dermis at one focus. Dermis shows small perivascular collection of lymphocytes with small areas of hemorrhage near periadenexal structure (Figs. 2 and 3).

DISCUSSION

Classical AKV often occurs during childhood [2] where Panja [3] reported the average onset age of AKV as 11 years old. However, the onset age of sporadic AKV is much later than that of classical AKV [4]. In our case, all features are of sporadic AKV on clinical examination –brown-colored hyperkeratotic plaques on dorsal aspect of both feet were noticed and three differentials were made. Necrolytic acral erythema lichen simplex chronicus and pellagroid dermatitis histopathological investigation of the biopsied lesion found a typical church-spire like pattern – a classical feature of AKV without signs of dyskeratosis and mild lymphocytic infiltrate made us confirm and rule out other mimicking diseases. Histopathologically, two differential diagnoses AKV of hopf and hyperkeratotic type of seborrheic keratosis were made. Acrokeratosis clinically manifests itself as flat-topped, polygonal, papules, and verrucous plaques. The brownish-skin-colored lesions have hard consistency and its friction can produce vesicles.

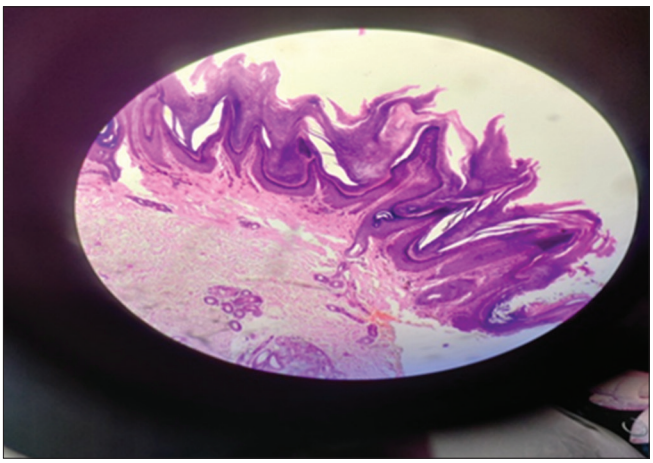

Fig. 2:

Biopsy shows hyperkeratosis, increase in thickness of granular layer, acanthosis slight papillomatosis, and frequently associated with circumscribed epidermal elevations resembling church spires. The rete

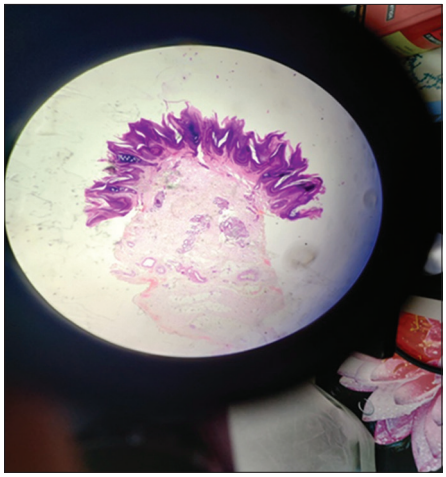

Fig. 3:

ridges are slightly elongated and extend to a uniform level [8]. Layne *et al*. reported a case of necrolytic acral erythema.

CONCLUSION

REFERENCES

1. Ormond D, Viana SS, Vitral EA, Pereira CA, Carvalho MT. 2011;23:S61-3. 44 Nair PA.
2. Dhitavat J, Macfarlane S, Dode L, Leslie N, Sakuntabhai A, MacSween R, *et al*. Acrokeratosis verruciformis of Hopf is caused by mutation in ATP2A2: Evidence that it is allelic to Darier's disease. J Invest Dermatol 2003;120:229-32.
3. Alain H. Acantholytic disorders of the skin: DarierWhite disease, acrokeratosis verruciformis, Grover disease, and Hailey-Hailey disease. In: Wolff K, Goldsmith LA, Katz SI, Glichrest BA, Paller AS, Leffell DJ, editors. Fitzpatrick's Dermatology in General Medicine. 7th ed. New York: McGraw-Hill; 2006. p. 437.
4. Buddhdev K, Phulari RG, Rathore R, Patel S. Seborrheic keratosis. J Oral Maxillofac Pathol 2014;18:327-30.
5. Bang CH, Kim HS, Park YM, Kim HO, Lee JY. Non-familial acrokeratosis verruciformis of Hopf. Ann Dermatol 2011;23 Suppl 1:S61-3.
6. Berna
7. Swetha P, Supriya NA, Kumar GR. Characterization of different verrucous mucosal lesions. Indian J Dent Res 2013;24:642-4.