

Annually recurring erythema annulare centrifugum – a rare entity

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Sri Lanka Journal of Dermatology, 2021, 22: 95-96

Introduction

Erythema annulare centrifugum (EAC) is a rare cutaneous disease which is characterised by either superficial erythematous annular centrifugally migrating lesions with classic “trailing scale” or with deep gyrate erythema which has more infiltrated borders. This clinical entity was first described by Darier in 1916⁴.

Annually recurring erythema annulare centrifugum is a very rarely reported peculiar variant of EAC which has identical clinical and histopathological features to classic EAC¹. Up to now very few similar cases are reported in the literature.

Here we report a similar case of annually recurring erythema annulare centrifugum in a young Asian female.

Case report

A 25-year-old Asian female presented with recurrent episodes of self-healing annular erythema involving both upper and lower limbs of four years duration. Lesions appeared every year with each episode lasting three to four months. Crops of erythematous mildly itchy lesions over extremities were followed by spontaneous resolution with no residual skin changes. With new crops of lesions appearing before older plaques resolved. These episodes were not associated with any systemic symptoms. She is a product of non-consanguineous parents and had no family history of similar cutaneous diseases. No precipitating cause including drugs was identified in the history.

Physical examination revealed multiple well defined erythematous papules that coalesce to form annular erythematous plaques with central clearing and centrifugal spread. Some lesions had centrally attached characteristic “trailing scale”. Healing lesions showed desquamation without scarring or pigmentary changes (Figure 1, 2). No palmar, planter, or mucosal involvement was noted. Her general and systemic examination didn't reveal any evidence of infection, autoimmune disorder, or malignancy.



Figure 1.



Figure 2.

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Biopsy taken from the edge of an annular lesion showed epidermal hyperkeratosis, perivascular infiltrate of superficial dermal vessels with a cuff of lymphocytes and a few eosinophils, giving the characteristic coat sleeve appearance. Deep dermal vessels were normal.

Clinical and histopathological features were compatible with the diagnosis of superficial EAC.

She was extensively investigated for a possible hidden secondary cause for recurrent EAC but didn't show any significant abnormality.

Discussion

EAC can appear in any age group but an increased incidence is observed in the fourth and fifth decades of life. Even though the majority is acquired, rare autosomal recessively inherited familial cases are also reported.

EAC is often idiopathic, however, some represent a cutaneous manifestation of type 4 hypersensitivity reaction to different antigens and underlying systemic diseases including infections (dermatophyte, bacterial, viral, parasitic and mycobacterial, etc.), drugs (finasteride, chloroquine, hydroxychloroquine, ustekinumab, rituximab), endocrine and immunological disorders (menstrual cycle, Hashimoto thyroiditis, Sjogren disease), and rarely hematological and other neoplastic disorders (HL, NHL, prostate, breast, ovarian carcinoma, etc.)⁴.

While our patient had superficial EAC, a deep form of EAC presenting with deep gyrate erythema with

infiltrated borders, and histology with unremarkable epidermis and mononuclear cell infiltration in mid and lower dermis⁴, is described.

Annually recurring erythema annulare centrifugum is a very rarely reported variant of EAC which clinically and histopathologically simulates classic superficial EAC but recurs periodically in each year^{1,2}. It has a female preponderance with a peak age of onset between 40 to 50 years^{1,2}, this can range from 16 to 80 years. Even though this variant is idiopathic, a full diagnostic workup is mandatory to exclude any underlying disorder.

Up to now, no definite treatment has been described for this entity. Proposed treatment options are topical corticosteroids, tacrolimus, calcipotriol, and NB-UVB. oral antibiotics and antifungals have been tried even in the absence of a definite identifiable source of infection, with variable outcome^{4,2}.

Our patient was successfully managed with topical corticosteroids and NB-UVB therapy.

References

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