GRANULOMA ANNULARE

P. M. Abdul Gaffoor

Doha - Qatar.

A case of Granuloma annulare and a short review of this condition is discussed. The condition resolved with cryotherapy.

Granuloma Annulare (G.A) is a benign self-limited condition of unknown pathogenesis. This is usually seen among children and younger age groups. G.A. may present clinically as localized, disseminated or subcutaneous lesions. The lesions are a group of non-tender, papules or nodules in the form of a ring or circle. The usual sites are distal extremities.

Case Report:

A 45 years old male patient attended Dermatology Clinic seeking treatment for a skin lesion on the dorsum of his right palm (Fig.1 & 2). The lesions were erythematous dome shaped

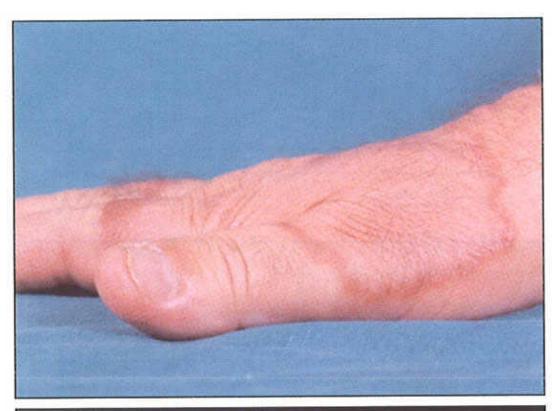




Fig. I: Erythematous dome shaped papules in the form of a ring on the dorsum of palm. (before treatment)

Reprint requests - P. M. Abdul Gaffoor, Department of Dermatology, Hamad Medical Corporation, P.O. Box: 3050, Doha-Qatar.

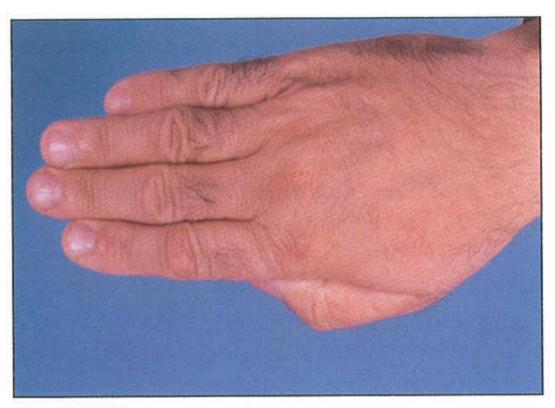


Fig. II: (After treatment)

papules in the form of a ring. The lesions were asymptomatic.

Skin Biopsy: characterized by a circumscribed collagen damage in the reticular dermis surrounded by histiocytes and lymphocytes and occasional giant cells. Skin biopsy confirmed the clinical diagnosis. The patient was treated by the application of liquid nitrogen with an interval of 7 days. Within 2 applications the lesions were resolved.

Discussion:

G.A. is a chronic skin condition of unknown origin with a tendency to form rings(1). G.A. results probably from a cell mediated response(2). The eruption is more commonly seen on the sun exposed area. The commonest sites affected are dorsal surface of the feet, hands and fingers(3). Even though eyelid is not the common site of Granuloma Annulare, it has been reported⁽⁴⁾. The colour of the lesions may vary. Usually the lesions are asymptomatic and may resolve spontaneously. G.A. measuring a diameter of 12cm on the trunk has been reported in a patient with diabetes mellitus(5). A cutaneous reaction histologically mimicking Granuloma annulare at the sites of resolved varicella-zoster virus reactivation infection has been reported⁽⁶⁾. The pathogenesis of this reaction is unclear. The presence of viral DNA suggests the virus induce an atypical delayed hypersensitivity reaction not affected by antiviral therapy(6).

Subcutaneous G.A. which occurs suddenly in an elderly may be a dermadrome of malignant blood disease⁽⁷⁾. Interstitial granulomatous dermatitis with arthritis is unique multisystem disease with variable cutaneous expression⁽⁸⁾. The G.A. in children is a benign condition but its course may last upto several years⁽⁹⁾. Multiple lesions are commonly seen in children.

The diagnosis of deep granuloma annulare is often difficult⁽¹⁰⁾. Generalized GA, is a rare variant affecting trunk and extremities. It has been suggested that generalized G.A. might consistute separate entity⁽¹¹⁾. The circulating human

immuno-deficiency virus may be a precipitating factor in G.A. and CD4 + and CD8+ dysfunction may be responsible for the typically short course of the disease⁽¹²⁾. G.A. and necrobiosis lipoidica diabeticorum⁽¹³⁾ have rarely been reported in the same patient. G.A. with atypical clinical presentation may be associated with an underlying haemopoitic malignancy and may be part of a generalized Granulomatous reaction to malignant lymphoma⁽¹⁴⁾. G.A., nodular type, must also be considered in the differential diagnosis of ocular and periocular lesions of at any age⁽¹⁵⁾.

The treatment of G.A. is not satisfactory. Even though there is no specific treatment, a variety of treatments are used. Trauma of the biopsy may sometimes, cure the condition. Dapsone, intralesional steroids, and freezing are widely used. Treatment with local cryotherapy (Ethyl Chloride), the lesions almost completely disappeared in a four year old girl with a rare form of G.A.⁽¹⁶⁾. Short-term treatment with low dose of chlorambucil orally has cleared the G.A. and clinical symptoms of Carpel tunnel syndrome in a 62 years old woman⁽¹⁷⁾. G.A. has been successfully treated with oral psorelan photo chemotherapy⁽¹⁸⁾. Drugs, such as Cyclosporin⁽¹⁹⁾, Isotretinoin⁽²⁰⁾, Potassium Iodide⁽²¹⁾, topical vitamin E⁽²²⁾ have been used. Surgical excision of the lesion of G.A. is not indicated⁽²⁵⁾.

The cause of G.A. is still unknown. Ultra violet rays, viral infection or local trauma may be a pre-disposing factor. The pathogenesis of this condition is controversial.

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