DISSEMINATED GRANULOMA ANNULARE

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Summary

The clinical and histopathological features of an atypical form of granuloma annulare in a 32 years old male patient are described. The lesions manifested in the form of disseminated papular eruption all over the body. The glucose tolerance test was abnormal. The pertinent literature is briefly reviewed.

Granuloma annulare is a chronic benign granulomatous dermatosis of unknown aetiology. The lesions are characterised by solitary or multiple intradermal or subcutaneous papules arranged in a circinate fashion. This entity was originally described by Colcott Fox[1] in 1895 under the name of "ringed eruption of the fingers". Later the present name was assigned to this in 1902 by Radcliffe-Crocker[2]. Many atypical variants of granuloma annulare like disseminated form; annular lichen planus like form; subcutaneous nodular form; erythematous papular form; giant form and perforating papular form have been described in recent literature[3]. But very few case reports of this uncommon disorder are available from India[4,5,6,7]. These too are typical and localized forms. The purpose of the present paper is to describe the clinical and histopathological features of an atypical form of granuloma annulare where the lesions manifested as disseminated papular lesions. To our knowledge this is the first report of disseminated granuloma annulare with abnormal glucose metabolism reported from this country.

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Case Report

32 years male reported to the Skin and V. D. out-patient clinic of S. S. Hospital, Institute of Medical Sciences, Varanasi, with the complaint of asymptomatic recurrent skin eruption all over the body of six months duration. The lesions first appeared on the upper extremities and later extended to the other parts. There was no history of constitutional symptoms like fever or joint pains, no history of cough. As far as he remembered there was no history of trauma or insect bites prior to this. No other member in the family had similar complaints.

Examination revealed numerous, discrete and confluent, dome shaped papular lesions of 2–6 mm in size, situated mostly on the back, abdominal wall, upper and lower extremities and palms (Figs. 1 and 2 Page No. 249). The lesions were skin coloured, shiny, firm and freely movable over the underlying subcutis. The surface was smooth and non-scaly. Scalp, mucous membranes and soles were spared. Systemic examination did not reveal any abnormality.

Investigations

TLC-9500/c.mm., DLC-P-10, L-86, E-3, M-1, ESR 14/mm. after 1 hour, VDRL Non-reactive, Rheumatoid factor Negative, X-ray chest – NAD, GTT – Fasting – 100 mg, 1 Hr. – 210 mg., 2 Hr.– 127 mg., 3 Hr. – 100 mg.

Histopathology

Skin biopsy from one of the lesions stained with haematoxylin and eosin revealed palisading granulomas in the dermis with areas of incomplete necrobiosis of collagen. The infiltrate was of histiocytes, plasma cells and lymphocytes. The collagen was pale at places with loss of normal fibrillar pattern (Fig. 3 Page No. 249).

Discussion

Granuloma annulare is a curious disorder of unknown cause. Many factors like trauma, toxins, infections, insect-bites, rheumatoid arthritis, tuberculin test, and sunlight have been blamed as precipitating factors[3]. None of these features were noticed in the present case. This disorder occurs commonly in children and young adults but no age is exempt. Females are affected twice as common as males[8]. It is interesting to observe that our patient is a male and middle aged. Heriditary predisposition has been observed in some instances[8]. No such feature was seen in the present case. The lesions manifested in a disseminated papular eruption in our patient. Similar cases of generalized forms have been described[9,10]. Lesions have been noted on the oral mucosa by Zangel[11] but in our case no such lesions were observed.

It has been said that granuloma annulare is a manifestation of rheumatoid arthritis because of the frequent association of the two conditions which also have similar histology[8]. No such association was observed in our patient. The relationship between granuloma annulare and diabetes mellitus is not exactly clear but it has been reported that disseminated form of granuloma annulare (adult type) is linked with diabetes[8]. The glucose tolerance test was abnormal in our case also, supporting the view that disseminated granuloma annulare may be associated with disorders of glucose metabolism.

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