A Case of Recurrent Disseminated Granuloma Annulare

A T J Goon, S S Wong

ABSTRACT

We present an 11-year-old boy who developed multiple pruritic, skin-coloured papules on his forehead, which subsequently spread to his trunk and limbs over a period of 6 months. Histology revealed granuloma annulare. The lesions underwent spontaneous regression over the next five years. He presented again when he was 18 years old, with a spontaneous eruption of multiple lesions on the trunk and the limbs 2 years after complete clinical remission from the first attack. A punch biopsy performed at this presentation revealed granuloma annulare again. No treatment was given and he is still being followed up. The tendency for spontaneous resolution of granuloma annulare is well recognised. Recurrent localized lesions often disappeared more rapidly than the original ones. Recurrence of disseminated GA, to our knowledge, has not been reported before.

Keywords: Granuloma annulare, disseminated, recurrent.

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An 11-year-old Chinese male first presented with multiple pruritic, skin-coloured papules in 1991. The initial lesions appeared on his forehead, which subsequently spread to his trunk and limbs over a period of 6 months. He had no other symptoms and there was no prior medical history or history of drug ingestion. Physical examination revealed multiple skin-coloured papules on his face, trunk and limbs. A punch biopsy

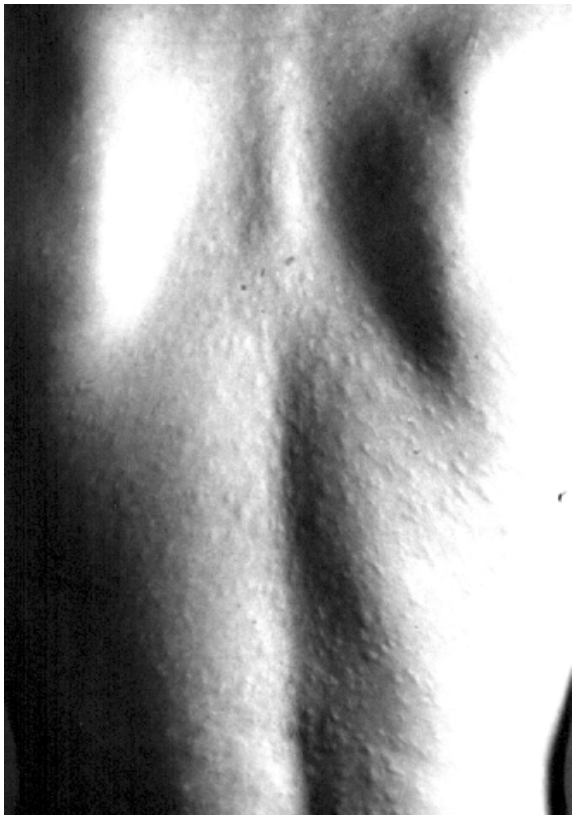

Fig. 1 The back of the patient showing recurrence of multiple papules.

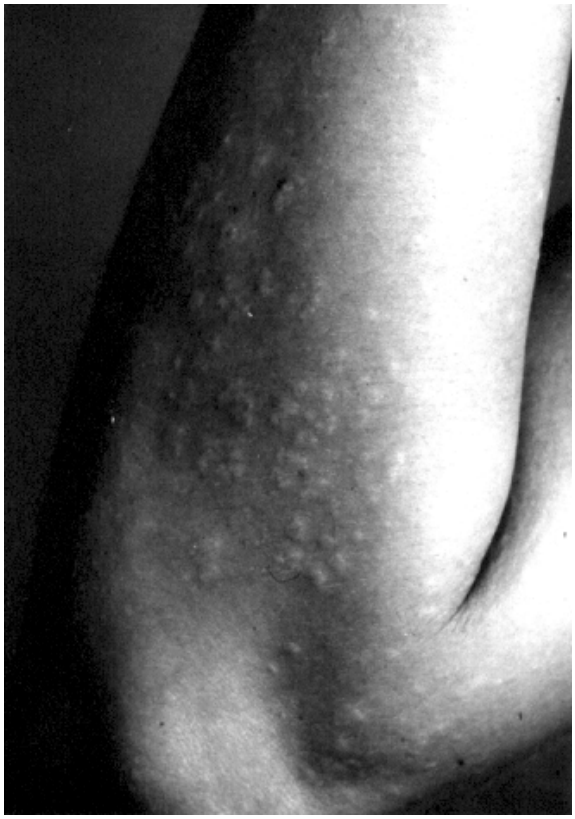

Fig. 2 The right elbow of the patient showing recurrence of papular lesions.

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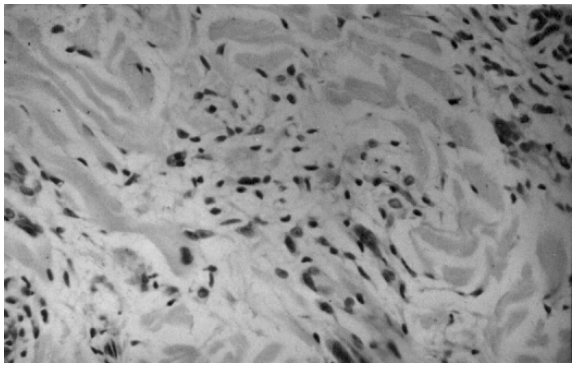

Fig. 3 Photomicrograph (original magnification x 100) showing palisaded granuloma consisting of Langhans giant cells and histiocytes in the upper dermis.

was performed, which showed palisaded granulomas consisting of Langhans giant cells and histiocytes in the upper dermis. Mucin was seen in the dermis. A diagnosis of granuloma annulare was made. Other investigations such as fasting lipid levels, fasting blood sugar level and full blood count were normal. No specific treatment was given and the lesions underwent progressive and complete regression over the next five years.

He presented again in 1998 when he was 18 years old, with spontaneous eruption of multiple lesions on the trunk and the limbs (Figs. 1, 2) over 6 months, 2 years after complete clinical remission from the first attack. A punch biopsy performed at this presentation revealed similar features (Fig. 3) to the first biopsy. No treatment was given and he is still being followed up.

DISCUSSION

Granuloma annulare (GA) is a disease of unknown aetiology, characterized by focal degeneration of collagen with surrounding areas of reactive inflammation and fibrosis. GA can occur at any age, with a female predominance[1,2]. Familial cases occur infrequently[3].

The commonest form of GA is the localised form but four relatively uncommon types are seen – generalised or widely disseminated GA, linear GA, subcutaneous nodular GA and perforating GA[2].

Generalised or widely disseminated GA presents clinically as predominantly annular lesions in 67% of cases and non-annular lesions in 33%[1]. They are occasionally pruritic. The age of onset is bimodal with 80% in the fourth to seventh decades and 20% before the age of 10 years[2]. Our patient presented with widely disseminated skin-coloured papular lesions involving the trunk and limbs which is rarely reported.

GA usually appears for no known reason, although it has been reported to occur following insect bites, sun exposure, tuberculin skin tests, trauma and PUVA therapy[2,4,6]. Viral infections including Epstein-Barr, HIV[5], and herpes zoster have also been associated with the occurrence of GA.

GA is rarely symptomatic and usually resolves without complications. Various treatments including X-ray therapy, cryotherapy, laser destruction, and sublesional triamcinolone injection have been used with success in case reports and series[2]. However controlled trials to confirm the efficacy of these treatment modalities are lacking. Systemic treatment with PUVA, pentoxifylline, nicotinamide, niacinamide[8], isotretinoin, salicylates, chlorpropamide, potassium iodide, thyroxine, aspirin, dipyridamole, dapsone, antimalarials, corticosteroids and chlorambucil has been reported to clear the lesions, but spontaneous resolutions make evaluations of treatments difficult[7-10].

The tendency for spontaneous resolution is well recognised. In more than half of 208 localized and disseminated cases, cutaneous lesions had disappeared in 2 years. In 40% of these there was recurrence, usually at the original site. Recurrent lesions often disappeared more rapidly than the original ones[3], and 80% of them resolved within 2 years but persistence for 10 years or more has been described[1]. In our patient, although spontaneous clinical resolution of the GA lesions was observed, his condition recurred 2 years after complete remission. Recurrence of disseminated GA, to our knowledge, has not been reported before.

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