

SUBCUTANEOUS GRANULOMA ANNULARE

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Two cases of subcutaneous granuloma annulare are reported. Clinical presentation was in the form of hard subcutaneous nodules; histopathology confirmed the clinical diagnosis. The cases were unique because of onset in adult hood, occurrence over unusual sites and absence of classical lesions of granuloma annulare elsewhere.

Key words : Subcutaneous granuloma annulare, Subcutaneous nodules

Introduction

Though granuloma annulare (GA) is a common entity in dermatologic practice, its subcutaneous form is uncommon and is infrequently reported in the literature. It's apparent rarity may be due to lack of awareness of the variant. In most cases it is associated with classical lesions of GA, when the diagnosis is relatively easy.¹ When present in isolation, a high degree of clinical suspicion and histopathology clinches the diagnosis.^{2,3} Children are more frequently affected, the disease may be present in the family.¹

We report 2 cases of subcutaneous granuloma annulare recently seen by us. Both the patients were adult; none had associated lesions of GA.

Case Reports

Case 1 : A 30-year-old housewife presented with bilaterally symmetrical asymptomatic nodules over elbows and knees of 3 years duration. The lesions initially appeared in the skin overlying the olecranon process, gradually increased in size and stopped growing 6 months after onset. Soon after, similar lesions appeared over prepatellar region. There was no associated fever, sore

throat, joint pain or redness of eyes. General and systemic examination was essentially normal. Multiple, skin coloured hard nodules of the size ranging from 5 to 15 mm were present (Fig. 1). They were freely mobile over

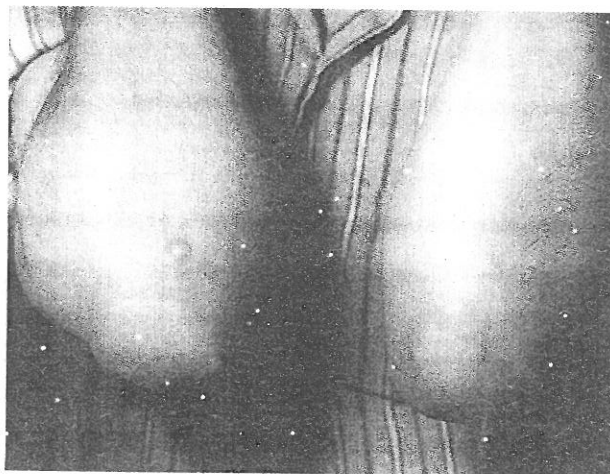


Fig. 1. Multiple asymptomatic skin coloured hard nodules present symmetrically over both elbows.

underlying tissues; overlying skin was adherent but normal in texture. Apart from GA, other clinical possibilities considered were calcinosis cutis, rheumatic nodules, rheumatoid nodules, xanthoma and fibromatosis.

Investigations revealed serum and urinary calcium as 10 mg/dl and 62 mg/dl respectively. Rheumatoid and antinuclear factors (ANF) were negative; serum cholesterol, triglyceride and lipoproteins were within normal limits. An excisional biopsy of one of the nodules over left elbow showed mucinous oedematous appearance of lower

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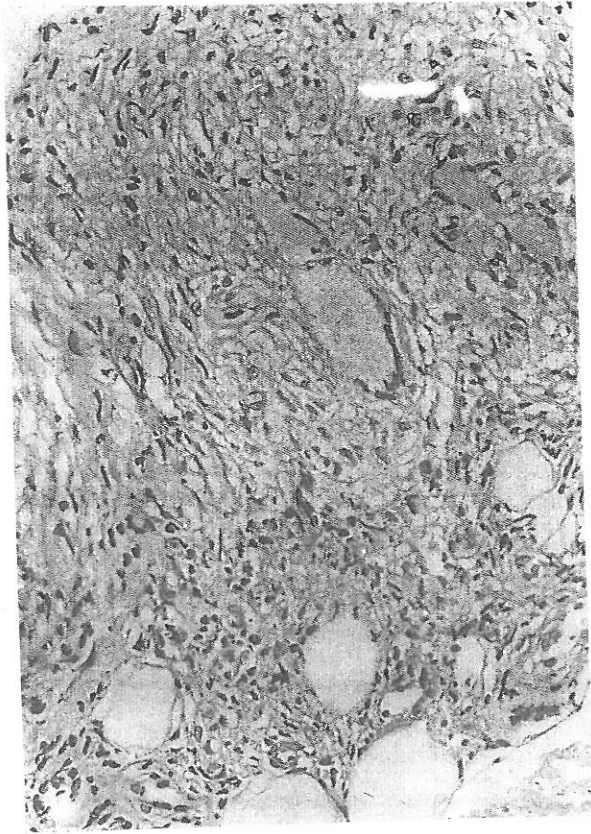


Fig. 2. High magnification. Discrete necrobiotic foci with palisading histiocytes and Langhan's giant cells invading into subcutaneous tissue. (x200)

dermis and adjoining subcutaneous tissue. There were occasional Langhan's giant cells and incomplete degeneration of collagen (Fig. 2). Von-kossa stain failed to show presence of calcium.

Case 2: A 33-year-old man presented with asymptomatic hard nodules over dorsal aspect of fingers and palms (bilateral) of 1 year duration. There was no history of associated fever, joint pain, sore throat or redness of eyes. On examination, no joint deformity was seen. Other examinations and investigations including excision biopsy of one of the nodules were essentially same as in case 1.

No family members, of both patients had subcutaneous nodules. Natural course of the disease was explained to the patients with possibility of spontaneous regression.

Comments

Subcutaneous form of granuloma annulare has been reported to be familial. None of our patients had family members similarly effected. Palms, buttocks, scalp and legs, are reported to be most affected by subcutaneous GA.⁴ The lesions predominantly involved olecranon and patellar regions in our patients, similar findings have been reported by others.⁵ Repeated trauma is presumed to be a triggering factor for localization of the lesions over bony prominences.⁵ In contrast to the superficial form, the deeper lesions have a hard consistency.¹ Because of the morphology and distribution, clinical possibilities of xanthoma, calcinosis cutis, fibromatosis and rheumatoid nodule are to be excluded. Rheumatoid arthritis and other disorders could be easily ruled out in both patients. Rare cases of anarthritic rheumatoid nodules and cases where rheumatoid nodules precede arthritis, differentiation from subcutaneous GA become difficult. However, some authors feel that probably they all are one and same entity.⁴ Although some workers, feel the 2 entities are indistinguishable histopathologically;^{4,8} others have emphasized that the histopathological similarity has been overemphasized and differentiation between the 2 conditions is possible.^{3,9} The necrobiosis in rheumatoid nodules has a homogenous eosinophilic appearance, whereas in subcutaneous GA there is mucinous oedematous appearance.⁹

Both our patients are unique as regards unusual age of onset, involvement of unusual site and not being associated with classical lesions of GA elsewhere.

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