

KNUCKLE PADS

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Two young males having multiple knuckle pads are reported. They had no other associated fibrodysplasias or defects. In one case even the thumb was affected.

Key words : Knuckle pads, Heloderma.

Knuckle pad is a well-defined dermal and epidermal thickening of the dorsal surface of the articular areas of one or more fingers or toes.¹ The cause of this dermatosis is unknown. Familial cases also have been reported.² They develop at any age and appear as asymptomatic, discrete, skin-coloured, raised, circumscribed lesions. Pseudoxanthoma elasticum, leukonychia, deafness, Dupuytren's contracture and palmo-plantar keratoderma are a few diseases and defects reported in association with knuckle pads.^{2,3} Histopathology reveals marked hyperkeratosis and acanthosis. Dermis may be thickened with hyperplasia of the connective tissue.⁴ As a rule, knuckle pads do not disappear spontaneously. Treatment is usually unsatisfactory. Surgical excision, though beneficial in some cases, may be followed by keloidal scarring. Intralesional corticosteroid therapy gives variable results.

We are reporting two cases of multiple knuckle pads in two young males.

Case Reports

Case 1

A 20-year-old male college student developed asymptomatic, firm, circumscribed, skin-coloured, raised lesions on the extensor aspects of the interphalangeal and metacarpophalangeal joints of left thumb and right middle finger (Fig. 1) since 6 years. The lesions started as simple thickening of the skin at these sites and gradually

attained the present size. There was no history suggestive of any trauma. There was no parental consanguinity and none in his family had similar skin lesions. There was no other abnormality.

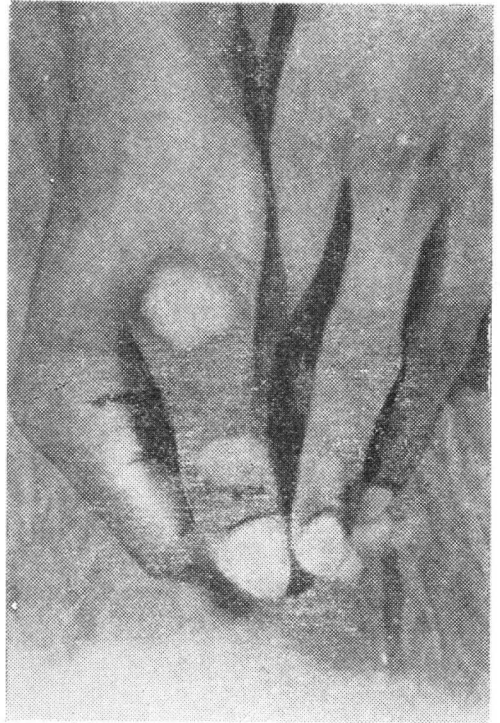


Fig. 1. Knuckle pads.

Results of routine laboratory investigations on blood, urine and stools were normal. Blood VDRL was non-reactive. Histopathological study of the lesion revealed marked hyperkeratosis and acanthosis with thickening of the dermis.

Case 2

An 18-year-old male student presented with asymptomatic, thick, raised lesions on the dorsal aspect of both index fingers since one year. The lesions started as thickening of the skin at those sites and gradually increased to the present size in one year. Examination revealed circumscribed, skin-coloured plaques over the dorsum of proximal interphalangeal joints of both index fingers. The plaques were not fixed to underlying structures. There were no lesions on thumbs. General physical and systemic examinations did not reveal any abnormality. Routine laboratory investigations on blood and urine were normal. Histopathology revealed hyperkeratosis with thickening of the dermis. Application of 10% salicylic acid ointment did not produce any reduction in the size of these lesions. Intralesional injection of hydrocortisone acetate also did not produce any relief.

Comments

Knuckle pad, also called heloderma is an intriguing dermatological entity, the cause of which still remains a mystery. Trauma is apparently not an important factor as only a very few cases have ever been reported where it could be definitely incriminated as causative.⁵ Bunnell⁶ suggested that knuckle pads might be atavistic in nature, noting their occurrence in apes. But since apes walk with fingers bent

under, trauma would certainly seem to play a role there. The present cases were not familial and they were not associated with other fibrodysplasias or defects. No history of any trauma could be incriminated. The cases reported by Bart and Pumphery² had associated deafness and leukonychia. Development of knuckle pads on the thumb is quite unusual.⁷ The case reported by Allison and Allison⁸ also had lesions on the thumb.

References

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