

KNUCKLE PADS

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A 10-year-old girl had knuckle pads over the pisiform bones and all the interphalangeal joints of hands, and palmar Dupuytren's contracture. Her mother had fewer similar lesions on the interphalangeal joints of fingers only. The third case was sporadic.

Key words : Knuckle pads, Dupuytren's contracture.

Knuckle pads are flat or convex, smooth, circumscribed and freely movable keratoses which develop slowly on the dorsa of finger joints. Usually these occur between 15-30 years of age and sometimes earlier as a sporadic defect, but familial cases have also been reported. The usual sites are dorsa of proximal interphalangeal (IP) joints, but occasionally distal IP joints or knuckles are also involved. The thumbs are usually spared. Rarely, similar lesions on knees and dorsa of feet have also been seen. It has been occasionally found to be associated with Dupuytren's contracture, other fibromatous lesions, sensori-neural deafness, leuconychia and palmo-plantar keratoderma.¹ We describe three more such cases recently observed by us.

Case Reports

Case 1

A 10-year-old girl had multiple, asymptomatic, circular to oval, smooth, skin coloured to hypopigmented, freely movable, circumscribed, flat to convex, 2 mm to 1 cm sized, bilaterally symmetrical thickenings of skin on all the IP joints of hands and pisiform bones. On a few IP joints of the hands, the lesions were multiple.

The lesions over the pisiform bones and hands were of 2 years and 1 year duration respectively. Her palms showed Dupuytren's contracture also. There was no evidence of sensori-neural deafness, leuconychia, palmo-

plantar keratoderma or any other abnormality. The history of self manipulation and biting on the lesions was denied. Her 12-year-old brother and 4-year-old sister were normal. Histopathology of a lesion revealed massive hyperkeratosis, acanthosis and thickening of the dermis.

Case 2

Mother of case 1, aged 32 years, had relatively less prominent similar lesions on the proximal IP joints of all the fingers. The distal IP joints of left middle, right little and right index fingers also had similar lesions. The thumbs were spared and the other sites were normal. She had had these lesions since childhood. There was no evidence of any other abnormality. The history of friction or any family member other than case 1, having similar lesions was denied.

Case 3

A 17-year-old female developed similar type of lesions over the IP joints of middle fingers, right little finger, right fourth and both fifth toes. distal IP joints of ring fingers and proximal IP joint of left second toe since 6 months. History of friction was denied. None in her family had similar lesions. She was otherwise normal. Histopathology of a lesion was consistent with the diagnosis of knuckle pads.

Comments

There have been a few reports on familial² as well as sporadic³⁻⁵ cases of knuckle pads. Most of the cases, except those of Pavithran⁵ and a case of Bart and Pumphrey² were females.

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Bart and Pumphrey² reported a family where females of three generations were involved. Our cases were also females. Out of these, two were familial also.

The aetiology of this entity remains uncertain. Since such pads occurred in apes, their atavistic nature has been suggested.⁶ Trauma would have played a role there. Although our cases denied history of any local trauma, there could have been some unnoticeable trauma, usually encountered by females at these sites during their routine work. Familial predisposition would have already been there.

Involvement of the skin over pisiform bones in case 1 was interesting. In addition, she had Dupuytren's contracture in both the hands. Association of Dupuytren's contracture and other fibromatous lesions has already been reported in the past.¹ The thumbs were reported to be involved in a few reports^{2,3,5} but our cases had normal thumbs.

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