

HEREDITARY CAMPTODACTYLY ASSOCIATED WITH PALMOPLANTAR HYPERHIDROSIS

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Hereditary camptodactyly can be associated with several other developmental anomalies. A case of hereditary camptodactyly in a 14-year-old girl with associated palmo-plantar hyperhidrosis is reported.

Key Words : Hereditary camptodactyly, Hyperhidrosis

Introduction

Hereditary camptodactyly is a rare type of fibromatosis with autosomal dominant inheritance affecting both sexes equally. It begins in childhood involving little fingers (bilateral) producing persistent flexion of proximal interphalangeal joints with sparing of metacarpo-phalangeal joints.¹ Rarely other fingers are also affected.² The resulting deformity closely mimics clawhand due to leprosy with which it is often confused with.^{3,4} It has been reported to be associated with several other developmental abnormalities. We here report a case of camptodactyly associated with palmo-plantar hyperhidrosis.

Case Report

A 14-year-old girl presented with excessive sweating of palms and soles of 3 years duration. It was continuous in nature and used to become worse in summer. There was no history of aggravation of sweating by emotion, anxiety and mental tension. No history of excessive sweating over any other part of the body including axillae was obtained.

No other family member had similar problem.

On examination, both her palms and soles were cold and wet with sweating. Starch-iodine test demonstrated individual sweat droplets. There was no acrocyanosis, Raynaud's phenomenon or aglodystrophy. Additional feature on examination was fixed flexion deformity of proximal interphalangeal joint of little finger of both hands (Fig. 1) which

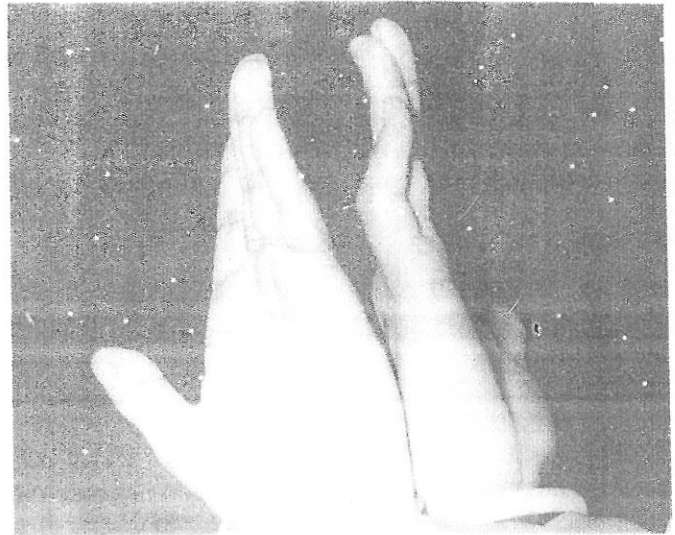


Fig.1. Bilateral fixed flexion deformity of proximal interphalangeal joint

according to her was present since birth. Her mother also had similar deformity since birth. All modalities of sensation were preserved. There was no wasting or weakness of small muscles of hands, no thickening of ulnar, median or radial cutaneous nerves or palmar fascia. Systemic examinations and relevant

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laboratory investigations were within normal limits.

The patient was diagnosed to have camptodactyly with associated palmo-plantar hyperhidrosis. Hyperhidrosis was treated with daily application of 20% aluminium chloride in absolute alcohol. The nature of deformity was explained to her and her father and they were reassured. When last seen, there was 60% improvement in sweating after 6 weeks application.

Discussion

Several developmental and systemic abnormalities have been reported in association with camptodactyly e.g., scoliosis, pectus excavatum, high arched palate, Dupuytren's contracture, Marfan's syndrome, trisomy-13, occulodonto-digital, oro-facioidigital and cerebro-hepato-venal syndromes.^{1,5} Camptodactyly has also been reported to be associated with knuckle pad⁶ and taurinuria.⁷ However, to the best of our knowledge, hyperhidrosis of palms and soles has not been reported so far as an association of

camptodactyly. Since palmoplantar hyperhidrosis is thought to be hereditary in origin,⁷ there could be some genetic interrelation between these two entities.

References

1. Burton JL. Disorders of connective tissue. In Textbook of Dermatology (Champion RH, Burton JL, Fbling FJG, eds), 5th edn. Oxford: Blackwell Scientific Publications, 1992; 1803.
2. Welch JP, Temtany SA. Hereditary camptodactyly. *J Med Genet* 1966; 3: 104-7.
3. Pavithran K. Camptodactyly simulating clawhand in a patient with indeterminate leprosy. *Ind J Leprol* 1991; 63: 232-4.
4. Singh G, Kaur V. Hereditary camptodactyly masquerading leprosy. *Ind J Dermatol Venereol Leprol* 1993; 59: 103-4.
5. Jobe MT, Wright II PE. Congenital anomalies of hand. In: Campbell's operative orthopaedics (Crenshaw AH, ed), 8th edn. Missouri: Mosby Year Book, 1992; 3416.
6. Pavithran K. Camptodactyly with knuckle-pad. *Ind J Dermatol Venereol Leprol* 1986; 52: 222-3.
7. Nevin NC, Hurwitz LJ, Neill, DW. Familial camptodactyly with taurinuria. *J Med Genet* 1966; 3: 265-8.
8. Herxheimer A. Excessive sweating: a review. *Trans St John's Hosp Dermatol Soc* 1958; 40: 20-5.