COEXISTING ACQUIRED DIGITAL FIBROKERATOMA AND DUPUYTREN'S CONTRACTURE

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A 38-year-old male developed acquired digital fibrokeratoma on the right hand associated with Dupuytren's contracture on the left hand. The possible relationship between these two fibrodysplastic conditions is considered.

Key words : Acquired digital fibrokeratoma, Acral fibrokeratoma, Dupuytren's contracture.

Acquired digital fibrokeratoma (ADFK) is an acquired benign hyperkeratotic, horn-like projection that usually develops on the fingers. It may resemble a rudimentary super-numerary digit, cutaneous horn, fibroma or wart. But clinically and histopathologically, it is a distinct entity. Bart et al[1] were the first to suggest the name acquired digital fibrokeratoma for this disorder. In a retrospective study, Pinkus[2] found that among 56,000 biopsy specimens, 28 had features of ADFK and suggested the term acral fibrokeratoma for this condition. Verallo[3] reported a retrospective study of 32 cases diagnosed histopathologically as ADFK. In 1969, Hare and Smith[4] reported 18 cases. Only a few cases have been reported from India.[5-7] We are reporting a case of ADFK in a middle aged male who had associated Dupuytren's contracture of one hand.

Case Report

A 38-year-old male developed an asymptomatic, firm, slowly growing hyperkeratotic projection on the middle finger of the right hand since 10 months and progressive contracture of the medial aspect of the palm and fingers of the left hand since three years. He noticed a firm nodule on the left palm since 3 years which gradually thickened and contracted causing flexion deformity of the metacarpophalangeal and proximal interphalangeal joints of the medial three fingers. The palmar skin at the affected site was firm and fixed, and contracting bands of tissue could be felt extending to the fingers. Both feet and the right hand appeared normal except for the presence of a firm, hyperkeratotic 1 cm long cylindrical excrescence on the medial aspect of the right middle finger 1 cm proximal to its tip (Fig. 1). The lesion showed a tendency for partial separation at its base. He denied history of local trauma prior to the onset of the skin lesion and none in his family had similar disease. He

Fig. 1. Acquired digital fibrokeratoma. Note partial separation at the base.

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was non-alcoholic and there was no personal or family history of diabetes or epilepsy. General physical and systemic examination did not reveal any other abnormality. Routine investigations of blood, urine and stools were normal. X-ray of the hands did not show any bony defect or soft tissue calcification. The keratotic lesion of the middle finger was excised at the skin surface level and the base was subjected to electrocautery. The histopathological study of the excised specimen revealed marked hyperkeratosis, acanthosis and elongation of rete pegs around a central core of connective tissue. The keratinocytes maintained their normal morphology. The dermal papillae were well formed. The core of the lesion consisted of bundles of collagen predominantly oriented in the vertical axis of the lesion. Verhoeff's staining showed normally appearing elastic fibres in the core.

Follow-up of the patient for one year did not show recurrence of the skin lesion at the site of excision. He denied consent for surgical treatment of the contracture of the left hand.

Comments

Dupuytren's contracture, characterized by fibromatous hyperplasia of the palmar aponeurosis and included among the polyfibromatosis syndrome, has been associated with an increased incidence of knuckle pads, Peyronie's disease, keloidal scarring and periarthritis of the shoulders.[8,9] The aetiopathogenesis of ADFK is not well understood. Its association with Dupuytren's contracture in the present case is interesting. In both conditions, there is fibrous tissue proliferation suggesting a peculiar diathesis related to connective tissue, although the type of connective tissue produced is different.

Whatever the nosological position of ADFK may be, most important for the clinician is to differentiate this condition from other common conditions like cutaneous horn, fibroma and amputation neuroma secondary to supernumerary digit. A large number of nerves and nerve structures (Meissner corpuscle-type) found in supernumerary digit were not seen in the present case. Further, the latter condition is seen at birth, occurs at the base of fifth finger and is often bilateral. Cutaneous horns do not have a prominent core of outgrowing connective tissue and often have a picture of epidermal neoplasia at their bases. Absence of papillomatosis and vacuolation of epidermal cells histopathologically excluded the possibility of warts. Ordinary fibromas are uncommon on hands[10] and are composed of abnormally dense connective tissue, architecturally distinct from that of normal cutis. Fibrokeratoma on the other hand is composed essentially of a protrusion of the connective tissue closely resembling that of normal dermis. According to Pinkus,[2] the elastic fibres are practically always absent in true fibromas.

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