Myofibroma of the Proximal Nail Fold: An Uncommon Neoplasm

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Sir,

Myofibroma was first described in infants and the lesions were often multiple or generalized. Subsequently, solitary lesions have been described in adults. Myofibroma is a distinctive lesion with characteristic morphological and behavioural features. We report here the first case of a periungual myofibroma.

CASE REPORT

A 47-year-old woman presented to our nail clinic because of a longstanding periungual tumour of the right index. Clinical examination revealed an adherent protruding pink-coloured stiff circular mass of the proximal and external lateral nail fold, with longitudinal lateral nail dystrophy (Fig. 1A). This tumour seemed to be fixed to deeper tissue. X-ray radiography was normal. Magnetic resonance imaging showed a fibrous tumour including the nail fold, the matrix and the periositis.

Surgery was performed (Fig. 1B) showing a poorly-defined mass, scar-like in consistency, greyish-white invasive tumour beneath the proximal nail fold, firmly attached to the articular capsule. Complete excision was performed with difficulties.

Histological study showed an unencapsulated neoplasm located in the dermis. It consisted of spindle-shaped cells with elongated nuclei forming short fascicles or whorls in a fibrous stroma with foci of hyalinization. There was no nuclear atypia, mitosis or necrosis. Less commonly, round-to-polyhedral cells with indistinct cells borders surrounding small vascular channels were seen. No mitotic figures were identified. The cells were immunoreactive for vimentin and smooth muscle actin (Fig. 1C) but did not stain for desmin or S100 protein. On the basis of histological and immunohistochemical studies, a diagnosis of myofibroma was made. The lesion did not recur after an 18-month follow-up.

DISCUSSION

The patient described had a poorly defined mass on the thumb, firm and scar-like in consistency, involving the nail fold, with nail deformity. The nail dystrophy was caused by excessive pressure on the nail matrix, due to the growth of a myofibroma in the contiguous soft tissue structures. Clinically, myofibroma can be confused with myxoid pseudocysts, dermatofibroma, dermatomyofibroma, sclerotic fibroma, fibroma of the tendon sheath, pleomorphic fibroma, neurofibroma, leiomyoma, glomus tumour and haemangiopericytoma (1–3). In all these cases, histological studies will correct the diagnosis.

Myofibroma are solitary or generalized soft tissue tumours that may be located in the skin and subcutis, skeletal muscle, bone and viscera (4). They occur most commonly in children, but have also been reported in adults, in whom they are often solitary, with a predilection for the head, neck, shoulder girdle, lower extremity and hand (4). Myofibroma respond well to excision, although local recurrence is possible. To our knowledge the case reported here is the first of myofibroma of the proximal nail fold.

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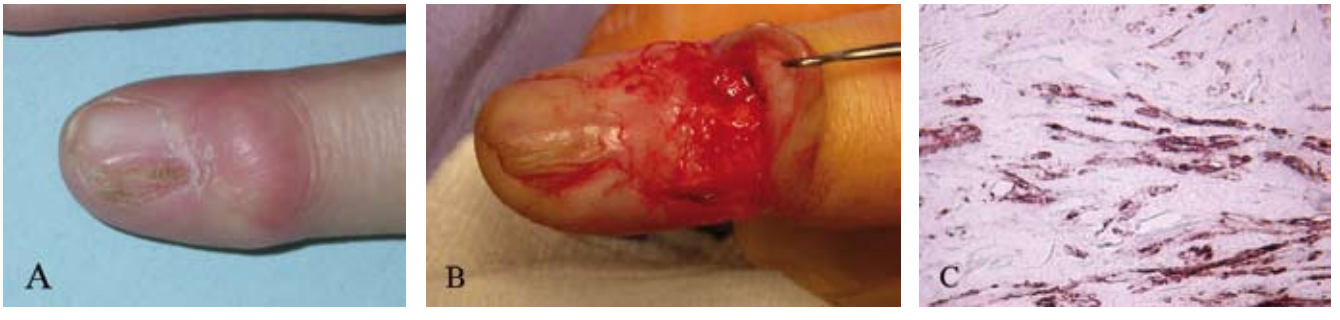

Fig. 1. (A) Pink-coloured stiff circular mass of the proximal and external lateral nail fold, with longitudinal lateral nail dystrophy. (B) Invasive tumour beneath the proximal nail fold. (C) Immunoreactivity of the cells with smooth muscle actin.

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