

Subungual Nodule of the Right Fourth Finger

A 14-year-old, otherwise healthy boy presented with a skin nodule for the past 3 years which slowly lifted up the right fourth fingernail. The lesion was tender to palpation. He denied any previous trauma and there was no family history of similar lesions. Physical examination revealed a firm, flesh-coloured, tender, hyperkeratotic nodule, protruding distally on the medial aspect of his right fourth finger, approximately 6 mm in diameter. The nail plate was markedly elevated but appeared normal (Fig. 1).

What is the diagnosis?

- a. Glomus tumour
- b. Subungual verruca
- c. Subungual fibroma
- d. Subungual exostosis
- e. Subungual epidermal inclusion cyst

Diagnosis

- d. Subungual exostosis

Discussion

Plane and lateral X-ray of the fingers revealed a calcifying projection on the dorsolateral aspect of the distal phalanx, continuous with the underlying bone (Fig. 2). Features are consistent with subungual exostosis. Subungual exostosis is an uncommon, solitary, benign bony tumour, typically arising on the dorsal aspect of the distal phalanx of the great toe. Subungual exostosis of the finger is rare. Only 15% of the lesions occurred on the fingers.¹ They occur predominantly in the second and third decades and most are on the index finger and thumb.² The aetiology remains unknown. It was proposed that the disorder is a fibrocartilage metaplasia caused by chronic irritation. A history of trauma or repetitive microtrauma was noted in 21 cases in the retrospective series of 28 cases of subungual exostosis.³ However, there is a case report of subungual exostosis following toenail removal, which suggested that acute trauma to the nail bed and underlying phalangeal periosteum during nail removal might have triggered off rapid bone growth resulting in subungual exostosis.⁴ Clinical appearance and radiographic findings are sufficient to confirm the diagnosis. Differential diagnosis includes subungual verruca, pyogenic granuloma, carcinoma of the nail bed, glomus tumour, amelanotic melanoma, enchondroma and subungual epidermal inclusion cyst. Some authors suggest that radiography is required for any proximal nail groove pain to save the patient from discomfort from unnecessary investigation such as biopsy.⁵ The treatment of subungual exostosis remains surgical. This patient was then referred to an orthopaedic surgeon for complete excision.



Fig. 1. Subungual nodule of the right fourth finger.



Fig. 2. X-ray of the right hand.

REFERENCES

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