

The Curious Case of the In-growing Toenail

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INTRODUCTION:

In-growing toenail or onychocryptosis is a common foot condition attributed to ill-fitting shoe wear, improper toenail trimming, repetitive trauma, genetic predisposition, hyperhidrosis, and poor foot hygiene¹. We are reporting an unusual presentation of patient, who developed recurrent in-growing toenail secondary to a relatively uncommon cause - subungual exostosis, also known as Dupuytren's exostosis.

REPORT:

A 17-year-old man complained of pain and swelling over his right big toe for past 1-year. He has undergone surgery for onychocryptosis at a local hospital a year back. His condition improved post-surgery but started to feel pain again 3 months later. His activity was affected, and it is almost impossible to wear shoes. On examination, there was a mass about 1 x 1.5 cm at the lateral nailfold, with a disfigured and elevated nail plate. Plain radiographs revealed bony overgrowth over dorsomedial aspect of distal phalanx. A provisional diagnosis of subungual exostosis was made, and surgery was advised.

Partial removal of the embedded nail plate was done to reveal a bony mass which was firmly attached to the distal phalanx. The mass was removed via osteotomy and ronguered at its base for clearance. Histopathological results confirmed the diagnosis of a subungual exostosis. Follow-up at 1 year showed no recurrence.



Figure 1: The mass and plain radiograph



Figure 2: Complete excision and post repair

CONCLUSION:

Subungual exostosis is a painful, benign bony projection of the distal phalanx of the digits. Marginal excision is the treatment of choice with a recurrence rate of 5% to 11%¹. Awareness, as well as obtaining plain radiographs of the toe will trigger a proper diagnosis. Special care must be taken to completely excise the tumour while preserving the nail matrix to further minimize risks of recurrence.

REFERENCES:

1. DaCabra M. P. et al., Subungual Exostosis of the Toes: A Systematic Review, Clin Orthop Relat Res, 2014; 472:1251–1259.