Dupuytren’s Subungual Exostosis Masquerading As An Ingrown Toe Nail

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INTRODUCTION:
Dupuytren’s subungual exostosis (DSE) is a rare pathology of toes. Because of the similar location, symptoms and epidemiology, DSE is easily misdiagnosed as ingrown toenail.

MATERIALS & METHODS:
We described a case of 13-year-old boy who presented with one year history of pain, non-healing ulcer and swelling over unilateral hallux.

CASE PRESENTATION:
A young adolescent who is active in football presented with painful chronic, slowly growing swelling and ulcer over right hallux with intermittent discharges. He was referred by a general practitioner to us in a tertiary center as onychocryptosis. There was 1x1x1cm swelling over medial aspect of right hallux elevating the nail bed, hard, hyperkeratosis with serous discharge. In view of atypical looking swelling, he was then subjected to plain radiograph that revealed tumor arising from distal phalanx of hallux. Patient underwent surgical excision of exostosis and histopathology had confirmed our diagnosis.

Figure 1: Preoperative images
Figure 2: Intraoperative images of a marginal excision of subungual exostosis
Figure 3: Images 6 weeks post excision biopsy

DISCUSSIONS:
Dupuytren was the first to describe DSE in 1817. It is an acquired, rare tumor arising most commonly from distal phalanx1. 70-80% of the cases affecting the hallux. Authors had hypothesized that it is related to repetitive trauma, infection and irritation but the exact cause is still unknown1. Initial symptom for DSE is subungual pain. Slowly, when subungual mass appears, it pushes the nail plate and seldom it can be superimposed by infection. Tender, epithelialized, slowly growing hard papule and unaltered displaced nail plate is highly suggestive of this condition1. Plain radiograph is a non-invasive test that should be part of the initial workup whenever DSE is suspected. Once identified, surgical excision of the exostosis is generally effective. However, 50% risk of recurrence1, hence, meticulous excision need to be done but to consider risk injury to the nail plate.

CONCLUSION:
Plain radiographs in a chronic, non-healing ingrown toe nail is mandatory to rule out other pathology including DSE.

REFERENCES: