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Clinical Image

CLINICAL IMAGE

Subungual exostosis recurrence in a 16-year-old athletic male

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Abstract

Subungual exostosis is a painful, benign bony outgrowth projecting from the distal phalanx of the toes. The present case consists of a 16-year-old male that presented to the primary clinic with a single circumscribed painful lesion underneath the nail of the first phalanx of the left foot that recurred after surgical extraction.

A 16-year-old male presented to a primary care clinic with a 3-month history of a single circumscribed painful lesion underneath the nail of the first phalanx of the left foot. Medical history was significant for a mass that had appeared on the same location 2 years prior. The patient consulted at a local hospital where the mass was surgically resected. Two years later, the mass reappeared with the same characteristics. An X-ray of the newly appeared lesion was taken (Fig. 1A). Physical examination revealed a deformed nail plate and a hyperkeratotic mass of 0.9 cm in diameter, with regular borders, and mild erythema that was protruding from underneath (Fig. 1B). On palpation, the mass was indurated, firm and tender. Pinch sign was negative. A left foot radiograph in the oblique projection revealed a pedunculated radiopaque mass emerging from the terminal end of the distal phalanx. The clinical and radiographic signs were consistent with the diagnosis of subungual exostosis (SE).

SE is a painful, benign bony projection of the distal phalanx of the toes or fingers associated with nail bed deformity [1, 2]. The average age of presentation is 26 years of age. However, 55% of cases occur in patients younger than 18 years, with 80% of cases affecting the hallux. SE also accounts for 17% of operations performed on the great toe [3]. Diagnosis can be confirmed on two levels: radiographically as bone excrescence of the dorsal or dorsomedial surface of the tip of the distal phalanx without continuity to periosteum and histologically, observing a fibrocartilaginous cap and endochondral ossification with lamellar trabeculae [3]. The mainstay of treatment is marginal surgical excision and, in most cases, proves to be curative. However, recurrence occurs in 4% of cases [4]. Possible complications include onychodystrophy (most common), onycholysis, infection and ingrown toenail [1, 4].

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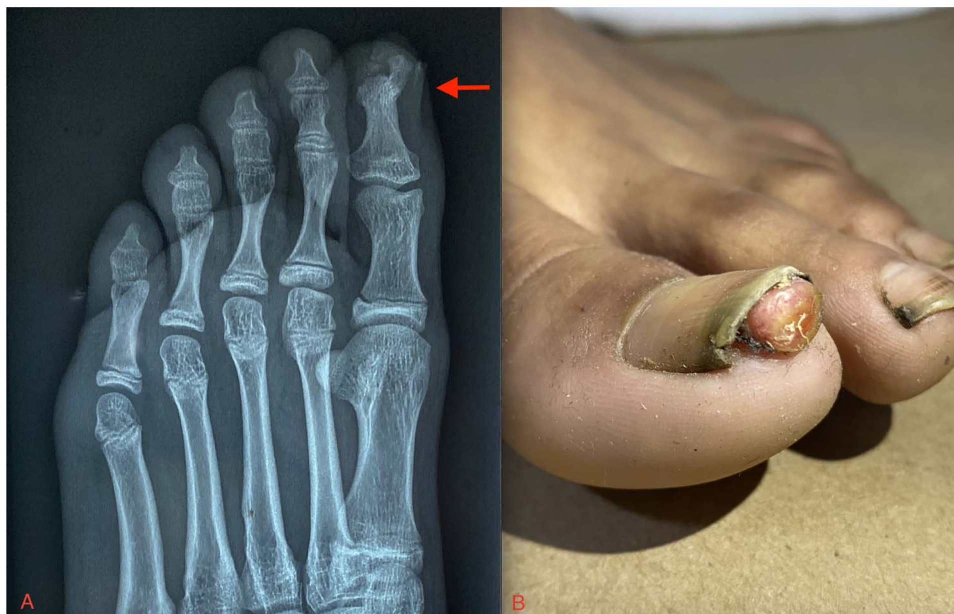

Figure 1: (**A**) Left foot radiograph in the oblique projection displaying a pedunculated mass emerging from the terminal end of the distal phalanx; (**B**) subungual mildly erythematous mass protruding from underneath the nail.

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CONFLICT OF INTEREST STATEMENT

None declared.

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ETHICAL APPROVAL

No approval required.

CONSENT

Patient consent was obtained.

GUARANTOR

J.A. is a guarantor of this clinical image.

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