Subungual exostosis in a 7-year-old boy

H M P Gunathilake[1], A M S D Kumari[1], K L P D Seneviwickrama[2]

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Abstract

Subungual growths are frequently encountered in paediatric dermatological practice. Majority of them are viral warts. Here we report a case of subungual exostosis (SE) in a 7-year-old boy for its rarity and usually the diagnosis is delayed in most cases.

Introduction

Subungual exostosis is a relatively uncommon[1] benign osteocartilaginous tumour arising from distal phalanx of the fingers and toes. Common differential diagnosis for SE are subungual viral wart, glomus tumour and melanotic subungual melanoma. Bony growth in X-ray in SE will help to differentiate from others.

Case report

A 7-year-old boy referred from Paediatric Surgical Clinic with skin growth over left hallux for six-month duration (Figure 1). It has gradually increased with time. His general examination was normal. On examination there was a small nodule over medial side of the big toe. Nail over nodule was broken and detached from the nail bed. Nodule was tender with irregular margin, surface was not verrucous, non-pyogenic, non-inflammatory lesion. Further examination revealed that no regional lymphadenopathy. No similar nodules found in other areas of body. Rest of the dermatological examination was normal. He had no family history of similar lumps. X-ray of foot was taken and it showed bony growth extending from medial side of distal phalanx (Figure 2). The diagnosis of SE was made and patient referred back to the paediatric surgeon for excision.

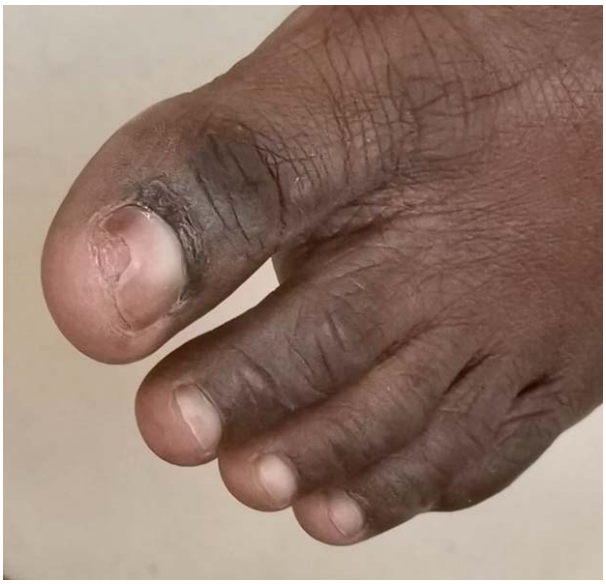

Figure 1.

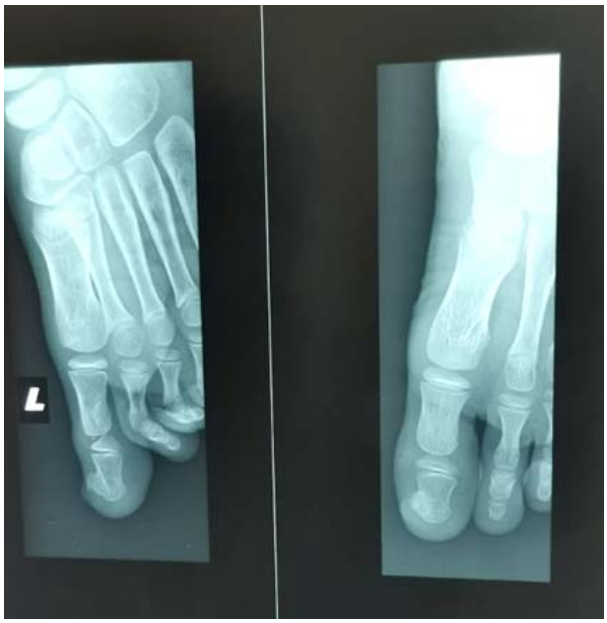

Figure 2.

Discussion

Subungual exostosis (SE) is a bony over growth that permanently attached to the tip of the distal phalanx. It's a benign tumour derived from bone and cartilage. The most common sites for SE are on the tip of distal phalanx of great toe usually on the inner and medial aspects and less commonly on the index and middle

[1]*Medical Officer of Dermatology,* [2]*Consultant Dermatologist , Sirimavo Bandaranaike Specialized Children's Hospital, Peradeniya, Sri Lanka.*

fingers. SE may occur at any age but half of the reported cases are less than twenty years of age and women are more commonly affected[1].

The cause is unknown but constant irritation to the bone, previous trauma, long standing infection are possible causative factors. There are two inherited conditions that can manifest as SE: Multiple exostoses syndrome and multiple exostoses-mental retardation syndrome[2]. The differential diagnosis of SE includes viral warts, subungual fibroma, pyogenic granuloma, osteogenic sarcoma and enchondroma[3].

Diagnosis is made with a lateral X-ray of the foot that shows a pronounced bone spur on the dorsal tip of the distal phalanx of the great toe. Symptoms of a SE includes pain with direct pressure to the toe nail and presence of hard bony growth. Distorted nail bed is found in severe cases. Commonest contributing factor for pain with SE is a tight toe box on the shoe[4].

Complete excision of the lesion and separating from the underlined nail bed structures results in lowest rate of recurrences and future complications[5]. Conservative care of SE includes modification of shoes to avoid direct pressure to the toe and symptomatic pain relief with non-steroidal anti-inflammatory drugs and reducing weight to put less stress on joint.

References

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