A nodule under the toenail

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Description

A nine-year-old girl, with no personal or familial medical past history, presented with skin thickness near the left big toenail. It appeared 6 months prior to presentation, initially as a white spot. There is no history of trauma to this site. We found a nodular thickness of the lateral side of the first toenail with axis deviation (Figure 1A). The dermoscopy revealed small thin vessels. The others nails of both feet were normal. We completed with an X-ray (Figure 1B).

What is the diagnosis?

Medial exostosis of the second phalanx of the first toe.

Subungual Exostosis (SE) is a rare, benign osteocartilaginous tumor of the distal phalanx [1,2]. It appears as a firm, fixed nodule with a hyperkeratotic surface on the distal phalange of the fingers or toes, especially the great toe [1,2]. The etiology is unknown [1]. Some mechanisms have been suggested to play a role in its development: infection, trauma, activation of a cartilaginous cyst, tumor and hereditary abnormality [1-3]. In some cases, rearrangement in collagen genes COL12A1 and COL4A5 have been found [2]. Differential diagnoses include subungual or periungual fibroma, fibrokeratoma, subungual warts, keratinized pyogenic granuloma, ingrown nail, osteochondroma and less commonly, subungual squamous cell carcinoma or melanoma [1-3].

Diagnosis is confirmed via X-ray imaging: SE appears as exophytic bony growth protruding from the bone [1,3]. Vascular ectasia, ulceration, hyperkeratosis, onycholysis can be visualized in dermoscopy [1]. Treatment is based on total resection of the exostosis. Recurrences are described in cases of incomplete removal [1-3].

Subungual exostosis is a rare and benign pathology. It should be considered when confronted with painful subungual lesions.
References

