

Case Report



Little Finger with Subungual Osteochondroma: Diagnostic Approach and Treatment

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ABSTRACT

Osteochondromas are the most frequently occurring bone tumors. However, they rarely arise in subungual locations. Clinically they appear as slow-growing masses causing deformity of the overlying nail. Here we evaluate a case of subungual osteochondroma of the little finger that is very rare in the literature. Radiological findings were diagnostic, and local tumor excision was the treatment of choice. The diagnosis was performed by a plain radiographic film and the lesion was completely detached from the nail bed. If a dense lesion detected in little finger of a young patient, it should be bear in mind that the lesion may be osteochondroma and complete removal may be chosen instead of biopsy.

Key Words: Subungual osteochondroma, Little finger

ÖZET

Serçe Parmakta Subungual Osteokondrom: Tanısal Yaklaşım ve Tedavi

Osteokondromlar nadir görülen kemik tümörleridir. Bazen subungual bölgede gelişebilirler. Klinik olarak, yavaş büyüyen kitleler şeklindedirler ve geliştiği tırnak yatağında deformiyeye neden olurlar. Biz burada literatürde nadir yayınlanmış olan serçe parmakta subungual osteokondrom vakasını sunuyoruz. Radyolojik bulgular tanısaldi, tedavi lokal eksizyonla gerçekleştirildi. Tanı direkt grafi filmi ile kondu ve lezyon tırnak yatağından tamamıyla çıkarıldı. Genç hastada serçe parmakta dens lezyon tespit edilirse lezyonun osteokondrom olabileceği akılda tutulmalı ve biyopsi almak yerine total eksizyon yapmanın uygun olacağı önerilmiştir.

Anahtar Kelimeler: Subungual osteokondrom, Serçe parmak

Osteochondromas are the most frequent benign bone tumors that affects small bones and are rarely seen in subungual locations of the finger (1). Its radiologic features are often pathognomonic, being composed of cortical and trabecular bone with an overlying hyaline cartilage cap that must demonstrate continuity with the underlying parent bone cortex and medullary canal (2). The treatment is surgical but recurrence is very common if the tumor is not completely removed from its base (6–60% of cases) (3).

CASE REPORT

A 12-year-old boy presented with a 1 year history of a slow-growing nodule of the distal nail bed of the little finger. On physical examination, a firm, yellowish-brown, hyperkeratotic nodule was noted under the distorted nail, approximately 7 mm in diameter (Fig 1). Radiographic examination revealed a well-

circumscribed, bony growth on the dorsum of the distal phalanx, continuous with the underlying bone (Fig 2). In the treatment, the nail plate was markedly elevated and the lesion completely resected under a digital nerve block. The patient was seen at 3-day intervals for 2 weeks. No instance of hemorrhage or infection was observed during this period. Healing of the nail bed became evident in 12 days.

Histopathologic analysis of the lesion showed a base of trabecular bone covered by a hyaline cartilage cap, confirming the diagnosis of osteochondroma.

DISCUSSION

Subungual osteochondromas are uncommon, solitary, benign bone tumors, commonly located on the dorsal aspect of the distal phalanx of the great toe, and much less frequently on the other toes, thumbs and fingers (4). There is a slight male predominance and approx

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Figure 1. Subungual osteochondroma is presenting as white, smooth-surfaced nodule which was lifted the nail plate.



Figure 2. Radiodense, little finger subungual osteochondroma (white arrow)

imately 75% of osteochondromas are identified before the patient is 30 years of age (2).

Clinically, subungual osteochondromas are presenting as firm, shiny, smooth-surfaced, white-yellow nodules, which is characteristic for the entity (1). As it progressively develops, it may lift the nail plate, ulcerate or induce subungual hyperkeratosis.

Plane X-ray findings are distinctive and diagnostic in the majority of cases. The presence of medullary bone contiguous with the stalk of the exostoses and the underlying cortical bone is the pathognomonic feature of the osteochondroma. Normal periosteum is uninterrupted along the lesion and its associated cortex, and calcified cartilage is often noted on plain films as little, radiodense foci (2).

Differential diagnoses include verruca vulgaris, subungual fibroma, keratoacanthoma, pyogenic granuloma, enchondroma, squamous cell carcinoma, amelanotic melanoma, giant cell tumor, and glomus tumor. The correct diagnosis can be confirmed by radiologic and histopathologic examination (3-5).

The common treatment for subungual osteochondromas is local excision of the bony lesion with curettage of the base. It is important to emphasize that tumor must be completely removed with curettage of its base to avoid recurrences (4). Radiographic controls assure a reliable follow-up to determine whether it is a real recurrence or an incomplete excision. If a dense lesion detected in little finger of a young patient, it should be bear in mind that the lesion may be osteochondroma and complete removal may be chosen instead of biopsy.

KAYNAKLAR

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