

Osteochondroma: An Unusual Cause of Stenosing Tenosynovitis of Peroneus Longus Tendon Associated With Os Peroneum

OSTEOKONDROM: OS PERONEUMUN EŞLİK ETTİĞİ NADİR STENOZAN PERONEUS LONGUS TENOSİNOVİT

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Abstract

There are few reports interested on osteochondromas associated with stenosing tenosynovitis of peroneal tendons in the literature. Peroneal tendon problems associated with sesamoid bone called os peroneum are one of the causes of the lateral ankle pain. We report a young girl complaining from lateral foot pain who had tenosynovitis of the peroneal tendons due to osteochondroma of the peroneal tubercle associated with bilateral os peroneum

Key Words: Os peroneum, osteochondroma, tenosynovitis

Özet

Peroneal tüberkülün osteokondromunun eşlik ettiği peroneal tendonların tenosinoviti ile ilgili az sayıda literatür mevcuttur. Peroneal tendon patolojileri ile birlikte sesamoid bir kemik olan os perineum lateral ayak ağrısına yol açabilmektedir. Lateral ayak ağrısı bulunan genç kız hastada bilateral os perineum ile birlikte tibial tüberkül osteokondromuna bağlı tenosinovit olgusu sunulmuştur.

Anahtar Kelimeler: Os perineum, osteokondrom, tenosinovit

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Osteochondroma is the most common benign bone and cartilage tumor which is usually congenital and treatment of them is mostly observation.¹ Problems concerning the peroneus longus tendon frequently due to tenosynovitis or subluxation of the tendon.²⁻⁴ Configuration and size of the peroneal tubercle is also important in peroneus tendon pathologies.⁵ Peroneal tubercle osteochondromas can cause stenosing tenosynovitis and lateral sided ankle pain.⁶ Os peroneum associated with tendon pathologies may also be a cause of lateral ankle pain.⁷

This is the reported first case that exhibiting bilateral stenosing tenosynovitis associated with osteochondroma of calcaneus in a young girl with bilateral os peroneums.

Case Report

A twenty-three years old girl who was complaining about bilateral foot pain was admitted to our hospital whose occupation is receptionist. This problem was first occurred 5 weeks ago on the left side. Because of refraining the problematic side she had overused the healthy side and for this RE-Thereupon pain was occurred bilaterally and prevented her duty.

Her main complaint was lateral foot pain increasing day by day especially during gait. The protuberances over the peroneal tubercles were

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told to be grown up (Figure 1a,1b). The patient walked on the medial side of the foot because of pain. Although there was no history of trauma the patient had repetitive bilateral ankle sprains.

The prominences over the peroneal tubercles were painful and there were minimal tenderness by palpation. Although the strength test of peroneal muscles revealed normal findings; both subtalar and tibiotalar joint movements were restricted. The inversion manipulation of the tibotalar joint increased the pain.

Both plain radiographs and computerized tomography demonstrated marked hypertrophy of the peroneal tubercle (Figure 2a, 2b). A diagnosis

of stenosing tenosynovitis of peroneal tendon associated with os peroneum and calcaneal osteochondroma was stated.

A surgical resection under spinal anesthesia was performed. Using an incision over the prominence the sheath of the peroneus longus tendon was exposed. The cartilaginous bony mass was exposed. The cartilaginous bony mass existed behind the sheath moreover enveloping it (Figure 3). The peroneus brevis tendon was intact and there was no evidence of peroneal tendon subluxation. The sheath of peroneus longus tendon was hypertrophied. With a little piece of sheath the mass was resected along with a piece of sheath by an osteo-



Figure 1a, 1b. The protuberances over the peroneal tubercles.

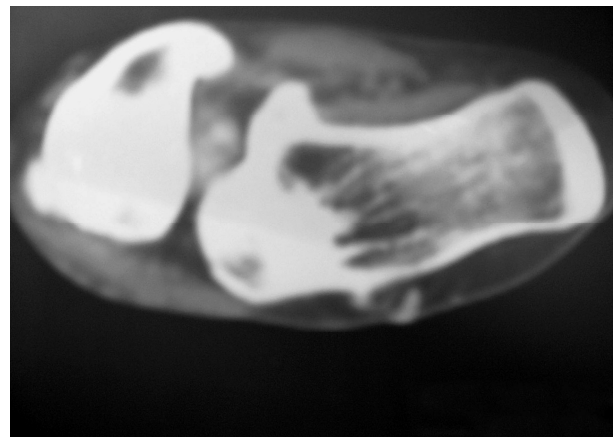
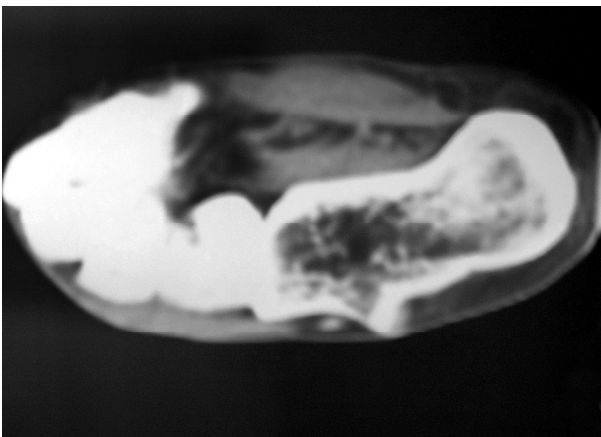


Figure 2a, 2b. CT images of protuberant peroneal tubercle.

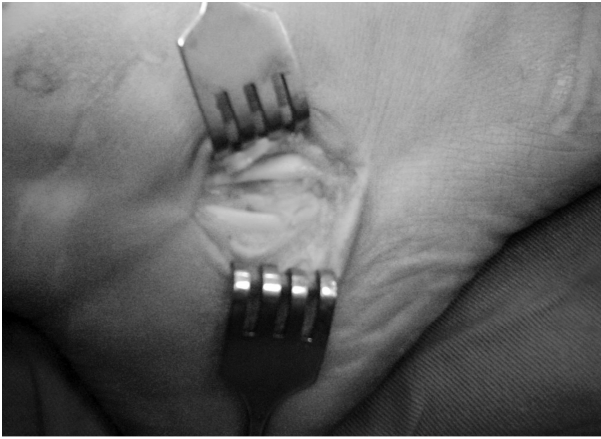


Figure 3. Intraoperative image of cartilaginous bony mass.



Figure 4. Excision material.

tome (Figure 4). Afterwards the sheath was sutured to the calcaneus primarily. The resected material was sent to the pathology laboratory for further examination. The pathologic diagnosis was notified as Stage I osteochondroma of calcaneus without malignant degeneration.

Discussion

Osteochondroma is the most common benign bone and cartilage tumor which is usually congenital and treatment of them is mostly follow up. It is a cartilage-capped bony projection on the external surface of a bone.¹ Because of trauma or perichondrial ring deficiency or an idiopathic cause a metaplastic cartilage is pretend to extend from the bone surface and form osteochondromas. Although fewer than 1% malignant degeneration into secondary chondrosarcoma these cases have to be closely followed. The cartilage of the cap must be entirely excised to prevent the recurrence.⁸ Surgical excision is effective.⁹

The peroneus longus muscle originates from the head of the fibula and the lateral condyle of the tibia. After passing inferior to the peroneal tubercle at the level of calcaneo-cuboid joint it turns to the direction of cuboid and inserts into the lateral aspect of the first metatarsal and medial cuneiform. The tendon averts the foot and plantar flexes the ankle. As far as to the distal tip of the fibula the peroneal tendons share the common sheath. Prob-

lems concerning the peroneus longus tendon frequently due to tenosynovitis or subluxation of the tendons

Even if the cause of stenosing tenosynovitis in this case was calcaneal osteochondroma, bilateral os peroneum was also diagnosed. Os peroneum is a sesamoid bone which is seen within the tendon of peroneus longus muscle. It is commonly partite. Fracture or displacement after this tendon rupture may be seen. Os peroneum fragment separation of 6 mm or more suggests os peroneum fracture and associated full-thickness peroneus longus tendon tear.¹⁰

Hypertrophy of the tubercle can cause stenosing tenosynovitis and impingement of peroneal tendons.^{2,3,4,7,11} Configuration and size of the peroneal tubercle is also important in peroneus tendon pathologies and can be classified.⁵

There are few reports interested on osteochondromas associated with stenosing tenosynovitis of peroneal tendons in the literature.⁶ This is the first report that is exhibiting bilateral stenosing tenosynovitis associated with osteochondroma of calcaneus in a young girl with bilateral os peroneums.

The cause of stenosing tenosynovitis was entrapment of both sheath and tendon of peroneus longus because of underlying an osteochondroma. This sesamoid was found adjacent to the tumor that rousing the tenosynovitis caused by the osteochon-

droma. The symptoms were recovered after the operation.

Peroneal tendon problems associated with sesamoid bone called os peroneum are one of the causes of the lateral ankle pain. This clinical problem can be evaluated like medial ankle pain associated posterior tibial tendon problems related to os naviculare externa. Expanded clinical and anatomical studies of the peroneal tendon and bone of the lateral ankle will be enlightening for different causes of the chronic lateral ankle pain

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