



Proximal tibiofibular synostosis

Proksimal tibiofibuler sinostoz

Ahmet Yiğit Kaptan, MD., O. Şahap Atik, MD.

Department of Orthopedics and Traumatology, Medical Faculty of Gazi University, Ankara, Turkey

ABSTRACT

A 22-year-old male patient admitted to our clinic with mild pain in left knee. Pain had started 10 years ago and there was no history of trauma. Pain was increased with kneeling. No abnormality was detected on physical examination. Imaging results revealed proximal tibiofibular synostosis in left knee.

Keywords: Proximal; synostosis; tibiofibular.

ÖZ

Yirmi iki yaşında bir erkek hasta sol dizde hafif ağrı ile kliniğimize başvurdu. Ağrı 10 yıl önce başlamıştı ve travma öyküsü yoktu. Ağrı diz çökünce artıyordu. Fizik muayenede anormallik tespit edilmedi. Görüntüleme sonuçları sol dizde proksimal tibiofibuler sinostozis gösterdi.

Anahtar sözcükler: Proksimal; sinostoz; tibiofibuler.

Synostosis of the proximal tibiofibular joint has been described in all age groups secondary to osteochondroma, knee valgus and other syndromes. O'Dwyer^[1] classified proximal tibiofibular synostosis into three types. All types included deformities like valgus deformity of the knee, distal positioning of the tibiofibular joint, and leg length discrepancy. Proximal tibiofibular synostosis without multiple hereditary exostosis is extremely rare.^[2-4] In this article, we reported a case of proximal tibiofibular joint synostosis with mild knee pain.^[5]

CASE REPORT

A 22-year-old male patient admitted to our outpatient clinic suffering from mild pain in left knee. There was no history of trauma. Pain was increased with kneeling. However, passive and active range of motion was within normal limits. There was no crepitation or numbness. Radiogram revealed proximal tibiofibular synostosis (Figure 1a, b). Computed tomography showed synostosis in the proximal tibiofibular joint (Figure 2). The patient was advised surgical treatment but he preferred

lifestyle modification. A written informed consent was obtained from the patient.

DISCUSSION

Synostosis has been reported at three levels between tibia and fibula. Distal tibiofibular joint synostosis is usually associated with trauma and it is the late complication of surgically treated ankle fractures.^[6] Middle tibiofibular joint is formed by interosseous membrane and this joint is between proximal and distal tibiofibular joints. Synostosis of the middle tibiofibular joint is also associated with trauma.^[7]

Proximal tibiofibular joint synostosis has also been reported in the literature. Growth deformities, exostoses, generalized syndromes, chromosomal anomalies and valgus deformities are associated factors for proximal tibiofibular joint synostoses reported in the literature.^[8,9]

However, symptomatic idiopathic proximal tibiofibular synostosis has been rarely reported in the literature.^[2,3] Sferopoulos^[4] investigated proximal tibiofibular joint synostosis among 1,029 patients



Figure 1. (a, b) Radiographs showing synostosis in the left proximal tibiofibular joint.

examined for osteoarthritis of the knee. There were three patients radiologically diagnosed as proximal tibiofibular joint synostosis. Two of the patients were idiopathic and the other patient had surgical treatment for lateral plateau fracture. However, these patients were not symptomatic.

Lateral knee pain, ankle pain, peroneal nerve palsy and pseudoradicular syndrome have been reported as symptoms of proximal tibiofibular joint synostosis in

the literature.^[10] Authors hypothesized that synostosis could cause dorsal root activation by stretching the peroneal nerve. However, our patient only had mild knee pain increased with kneeling.

Idiopathic proximal tibiofibular joint synostosis is a rare condition and a variety of symptoms can be found in a patient. Patient's symptoms and physical examination and radiogram findings are diagnostic for the disease.

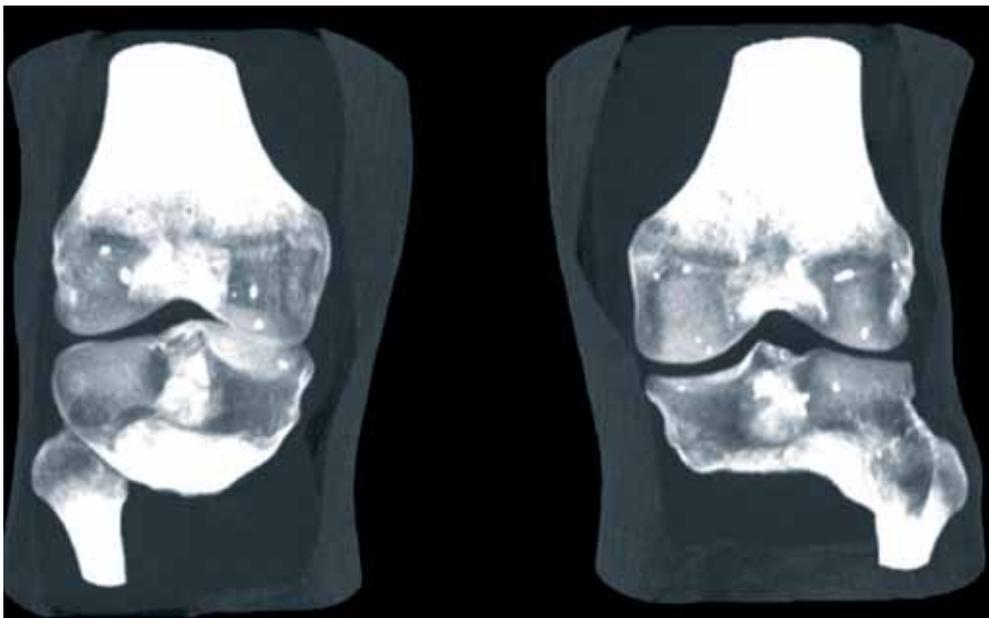


Figure 2. Computed tomography showing synostosis in the left proximal tibiofibular joint.

Declaration of conflicting interests

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