Asymptomatic bilateral Köhler's disease: A case report

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Abstract. Köhler's disease is the idiopathic osteochondrosis of the tarsal navicula. It is an uncommon disorder of the foot. Köhler's disease is a bening disease and recoverable itself. Main symptom of the disease is pain in the midfoot. Treatment is symptomatic. Generally, surgery is not necessary. The popular choices of treatment are shoe support and cast immobilization. In this article, we presented a-six year old boy who had bilateral Köhler's disease.

Key words: Köhler's disease, osteochondrosis, foot

1. Introduction

Köhler's disease (KD) is a rarely seen and idiopathic osteochondrosis of the tarsal navicula (1). It was described in 1908 for the first time by Köhler (2). KD occurs predominantly in male children and it is mostly seen at ages of 4-6. The main symptoms of the disease are the localized foot and limb pain (2). In this paper, we presented a-six years old boy who had bilateral KD.

2. Case report

The patient applied to the emergency service due to a foot sprain that emerged while running. Edema, ecchymosis and tenderness in the foot dorsum were determined in the consultation of the patient. Bilateral sclerosis, collapse and irregularity were observed in the navicular bone

This case report was presented as a poster in XXII. National Turkish Orthopedic Congress between October 31 -

November 5, 2010.

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Received: 22.05.2011 Accepted: 25.08.2012 during the radiologic evaluation of the foot (Figure 1). No pathology was seen in the other bones. It was learned that there was not limb or foot pain in patient's history until today. Soft tissue injury and coincidentally determined KD diagnosis were established and the non-steroidal and anti inflammatory drugs were given to the patient. No pathological symptom was determined in the control consultation which took place 3 weeks later.



Fig. 1. Right and left foot AP X-ray images of the case show sclerosis, collaps and irregularity in the navicular bone.

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3. Discussion

KD is a self-limiting and idiopathic disease of the navicular bone. It has to be examined in the children who applied with the complaints like foot and limb pain. All biochemical tests are normal of KD. Irregularity, flattening, sclerosis and fragmentation are radiologically seen in the navicular bone. If the findings are mild, shoe support is applied; however if the case is serious, short leg plaster is applied at least for 8 weeks in the treatment. These treatments are usually effective. The disease heals spontaneously and surgical treatment is rarely needed (3).

It has to be kept in mind that KD can be bilateral. If there is a situation in which there are

questions for KD, X-ray should be demanded for both feet. In addition, it should not be forgotten that the disease can be asymptomatic.

Reference

- Tsirikos AI, Riddle EC, Kruse R. Bilateral Köhler's disease in identical twins. Clin Orthop Relat Res 2003; 409: 195-198.
- Köhler A. A Frequent disease of individual bones in children, apparently previously unknown. Muench Med Wochenschr 1908; 55: 1923-1925.
- Karp MG. Köhler's disease of the tarsal scaphoid: An end-result study. J Bone Joint Surg Am 1937; 19: 84-96.