Sequelae of Osgood-Schlatter

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Abstract

Osgood-Schlatter disease is the traction apophysitis of tuberositas tibia and the most common cause of knee pain in adolescents. Despite the frequent discomfort, sequelae are rarely observed. In this paper, sequelae of Osgood-Schlatter disease, presenting with knee pain in the emergency room were submitted. Rarely encountered in the emergency department in adult patients presenting with knee pain with sequelae of Osgood-Schlatter disease, the need to be aware of the diagnosis, clinical and radiological features and differential diagnosis are discussed. (JAEM 2014; 13: 95-6)

Key words: Osgood-Schlatter disease, adult, knee pain

Introduction

Osgood-Schlatter disease is the traction apophysitis of the tuberositas tibia and the most common cause of knee pain in adolescents, especially in athletic children between the ages of 8-15 years. However, some characteristic symptoms and findings of this disease should be well known for distinguishing it from other more common (trauma and meniscopathy) and important (infection and tumor) causes of knee pain. Despite its frequent occurrence, late sequelae are rarely observed. In this paper, based on the literature, it was discussed that sequelae of Osgood-Schlatter disease can be confused with fractures in patients admitted to the emergency department with complaints of knee pain.

Case Presentation

A 36-year-old male patient presented to the emergency department with complaints of pain and swelling on his right knee, which developed after playing football. In the physical examination, it was found that there was localized swelling and tenderness with palpation on the region of the proximal tibia over the front of the right knee but no rash. He could perform his knee movements exactly actively and passively but with increasing pain, especially with knee flexion and any contact. Other system findings of the patient were normal. Bilateral knee X-ray graph found a piece of bone along the disconnected patellar tendon axis in the tuberositas tibia (Figure 1). Although the presence of fracture was considered based on the graph, the previous complaint of swelling and existence of sclerosis around the piece of bone when examined carefully led us to suspect the diagnosis of sequelae of Osgood-Schlatter disease. The patient was recommended to use analgesic-anti-inflammatory drugs, to administer cold compression, and to restrict his knee movements. Additional medical workup was not considered for the patient, because his complaints disappeared in the follow-up examination after 10 days.

Discussion

Osgood-Schlatter disease is a benign, self-limited disorder that grows rapidly and is seen mostly in active athletic adolescents. In spite of its frequent incidence, its sequelae are rarely observed. It is diagnosed through clinical and radiological means in childhood. Its characteristic symptom is pain on the front of the kneecap, 2-3 cm below patella. This pain is usually felt when contacted directly during activity, and it disappears with rest. Patients typically do not present with a history of trauma.

The etiology of the disease is controversial. It is thought that it occurs due to microtraumas in the tuberositas tibia. Generally, it is treated with the use of analgesics and restricted knee movements (1-3). Surgical treatment is administered only for recurrent cases and sequelae cases causing any cosmetic problems (4).

Patients usually present with a complaint of chronic pain on knee. However, although it occurs rarely, they may be admitted to the emergency department with sudden onset of pains. In addition
to localized tenderness, irregularities on the tuberositas tibia, frag-
mentation, and pieces of bone toward the patellar tendon are seen
on the direct graph (5-7).

**Conclusion**

Osgood-Schlatter disease sequelae can be confused with tuber-
ositas tibia fractures in adults. So, emergency physicians should take
Osgood-Schlatter disease into consideration in the differential diag-
nosis for knee pains and its sequelae in adults.

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tient who participated in this study.

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**References**

1. Lucena GL, Gomes CD, Guerra RO. Prevalence and Associated Factors of
Osgood-Schlatter Syndrome in a Population-Based Sample of Brazilian
2. Gholve PA, Scher DM, Khakharia S, Widmann RF, Green DW. Osgood
3. Huang YC, Chao YH, Lien FC. Sequential avulsions of the tibial tubercle
[CrossRef]
4. Pihlajamaki HK, Visuri TI. Long-term outcome after surgical treatment of
unresolved osgood-schlatter disease in young men: surgical technique.
5. Bellicini C, Khoury JG. Correction of genu recurvatum secondary to Os-
6. El-Husseini TF, Abdelgawad AA. Results of surgical treatment of unre-
[CrossRef]
7. Cser I, Lenart G. Surgical management of complaints due to indepen-
dent bone fragments in Osgood-Schlatter disease (apophysitis of the