CASE REPORT

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An Unexpected Cause of Knee Pain in a Patient with Juvenile Idiopathic Arthritis: Osteoid Osteoma -

ABSTRACT
Patients with chronic diseases may sometimes be underestimated because of the relapsing nature of the disease and thus some newly developing phenomena may be overlooked. In this case we present a 12-year old female patient who was followed up for juvenile idiopathic arthritis and applied to us as an exacerbation of the disease. After initiation of therapy all her complaints but the right knee improved. In the examination of knee, limitation in hip movements was detected. X-ray of the hip revealed a mass neighboring the minor trochanter. On magnetic resonance imaging the mass was detected to be an osteoid osteoma. The patient is free of pain with conservative treatment for tumor after twelve months. It is important to evaluate the patient thoroughly without focusing on a single point and keep in mind that in especially skeletally immature patients hip pain can be felt in the knee.
Key Words: Hip pain, Knee Pain, Osteoid Osteoma

Juvenil İdiopatik Artritli Bir Olguda Diz Ağrısının Beklenmeyen Nedeni: Osteoid Osteoma -

ÖZET
Kronik hastalıkları olan kişiler hastalıklarının tekrarlayıcı doğası nedeniyle bazen yeterince değerlendirilemeyebilir ve böylece yeni gelişen tablolar gözden kaçabilir. Bu yazıda juvenil idiopatik artrit nedeniyle takip edilmekte olan ve bize hastalığın akut alevlenmesi şeklinde başvuran 12 yaşında bir kız hastayı sunuyoruz. Tedaviye başlandıktan sonra sağ dizindeki ağrı dışında tüm şikâyetleri geçmişti. Diz muayenesinde kalça hareketlerinde kısıtlılık tespit edildi. Direkt grafide trokanter minör komşuluğunda bir kitle görüldü. Manyetik rezonans görüntülemede kitlenin osteoid osteoma olduğu belirlendi. Tümöre yönelik konservatif tedavi ile 12 ay sonunda hastanın şikâyeti bulunmamaktadır. Hastayı tek bir noktaya odaklanmaksızın bir bütün halinde değerlendirmek ve özellikle iskelet yapısı olgunlaşmamış olgularda kalça ağrısının dizde hissedilebileceğini göz önünde bulundurmak önemlidir.
Anahtar Kelimeler: Kalça Ağrısı, Diz Ağrısı, Osteoid Osteoma.

INTRODUCTION

Patients experiencing a chronic rheumatic disease may suffer a lot during exacerbations of the disease. It can also be challenging to diagnose other conditions mimicking the rheumatic disease, because the prior disease may mask the latter one. If a patient with arthritis has pain that is nonresponsive to conventional treatments, it may be necessary to take into consideration and search other pathologies such tumoral conditions. Intraarticular osteoid osteoma is uncommon and may cause a challenging course for both rheumatologists and orthopedic surgeons because it causes a persistent synovitis (1). A careful and thorough assessment including a good history, laboratory tests and imaging modalities is essential for those cases.

We present a case of juvenile idiopathic arthritis (JIA) who had an osteoid osteoma in the hip at the same time and delayed diagnose because of the similar clinics of those conditions.

CASE

A 12-year old female patient who was followed up for RF (-), polyarticular JIA for 18 months applied to our department of physical medicine and rehabilitation. On the application the patient had findings of active arthritis in her knees, ankles and elbows. She had tenderness and warmth around the involved joints and joint effusion with reduced range of motion and pain on movement. Her ophthalmic examination revealed no involvement of the eyes. It was thought as exacerbation of JIA and 250 mg/day naproxen sodium and corticosteroid treatments (Deltakortil®-5mg/day) were initiated. After 20 days of treatment pain and inflammatory signs in all joints but right knee relieved and she was free of pain. After seven days an increasing pain without any findings of inflammation, in her right knee occurred. Also other parameters of inflammation were found to be normal. In the examination of knee, pain in hip movements was detected. An anteroposterior X-ray of the pelvis was obtained and a cystic lesion with dense surrounding reactive sclerotic bone in the proximal femur was detected (Figure 1).

Magnetic resonance imaging of the right hip revealed a nidus suggesting osteoid osteoma next to the minor trochanter (Figure 2). Aspirin treatment of 500 mg/day was initiated and after 20 days the patient was completely free of pain without any disability. After such a relief, surgical treatment was not recognized for the patient and she has been followed up with medical treatment. After twelve months of follow up she is still free of pain.

DISCUSSION

Osteoid osteoma is the most common osteoblastic, solitary, benign bone lesion (2). It usually occurs in cortices of long bones but it may also be seen in smaller bones (3). It can cause marked cortical thickening and persistent pain that predominates at night (2,3). Juxtaarticular or intraarticular osteoid osteomas are frequently misdiagnosed as arthritis (4,5), because they may produce a long lasting synovitis (1,2,6), and the clinical symptoms may contain pain, soft tissue swelling, joint effusion or decreased range of motion and thus mimicking inflammatory arthritis (3,4). As seen in this patient, because the symptoms are attributed to a previous disease, the delay in diagnosis can range from six months to two years (7).

Treatment options for osteoid osteoma include medical and surgical methods. Medical treatment consists of using aspirin or other NSAIDs for a prolonged period and the surgical methods consist excision or destruction of the nidus (2). Also a non-operative approach is supported by the natural history of this tumor. Because these tumors are non-progressive and may spontaneously regress in several years' medical management may be used for some patients. Regression process can last approximately three years (3).

An arthritic joint exhibits the cardinal signs of inflammation, such as swelling, erythema, heat, pain, and loss of function. Any joint can be affected by juvenile idiopathic arthritis, but large joints are more frequently involved than smaller joints and the involvement is usually symmetrical (8,9).

Children with arthritis may not complain of pain while at rest, but when the joint moved pain occurs. Joint tenderness is usually maximal at the joint line or just over the hypertrophied, inflamed synovium. It is important to remember that bone pain or tenderness is not characteristic of juvenile rheumatoid arthritis and may instead indicate the possibility of a malignancy involving bone (8).

When the patient has accompanying diseases, the clinical phenomenon may be more challenging. Also the referred pain must be kept in mind. In especially skeletally immature individuals, pain which is related to conditions of the hip, may be felt in the knee (10,11). A careful and thorough assessment including a good history, laboratory tests and imaging modalities is essential for those cases.

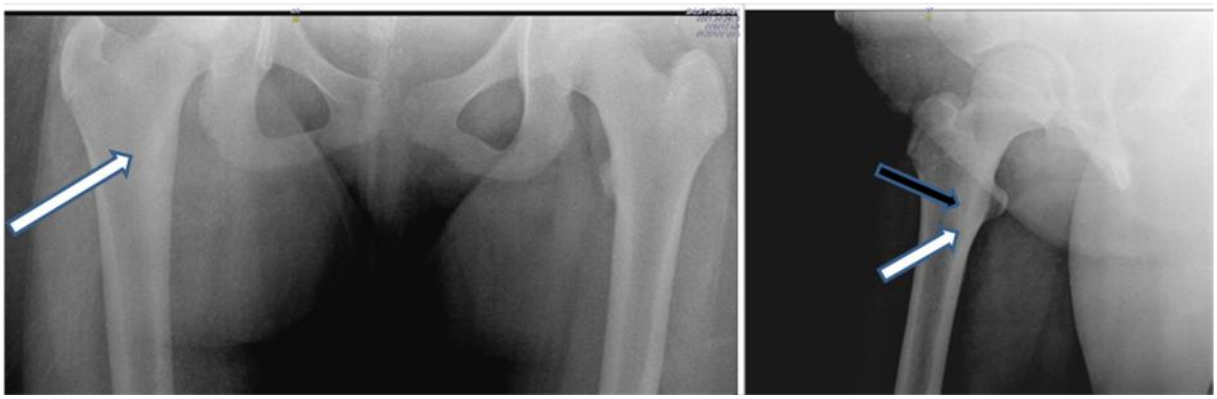

Figure 1. Anteroposterior and lateral X-rays of the right femur (white arrow; reactive sclerotic zone, black arrow; the nidus).

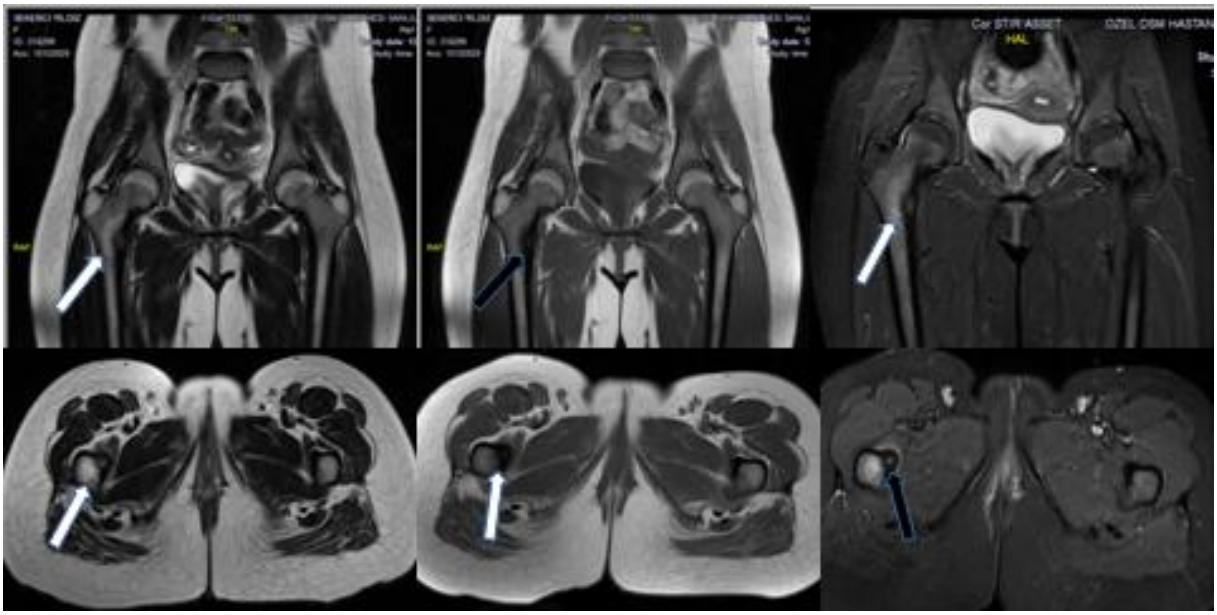

Figure 2. Bone marrow edema (white arrow) and the nidus (black arrow) are seen on magnetic resonance imaging.

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