Case Report

Proximal iliotibial band syndrome: case report*

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\textbf{ARTICLE INFO}

Article history:
Received on May 8, 2012
Accepted on June 27, 2012

Keywords:
Hip
Iliotibial band syndrome
Ilium
Magnetic resonance imaging
Pain

\textbf{ABSTRACT}

Objective: The overuse injuries in the hip joint occur commonly in sports practitioners and currently due to technical advances in diagnostic imaging, especially magnetic resonance imaging (MRI), are often misdiagnosed. Recently, a group of people were reported, all female, with pain and swelling in the pelvic region. T2-weighted MRI showed increased signal in the enthesis of the iliotibial band (ITB) along the lower border of the iliac tubercle. We report a case of a 34 year old woman, non-professional runner, with pain at the iliac crest with no history of trauma and whose MRI was compatible with the proximal iliotibial band syndrome.

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Síndrome da banda iliotibial proximal: relato de caso

RESUMO

As lesões por sobrecarga na articulação do quadril ocorrem comumente em praticantes de esporte e atualmente, por causa do avanço das técnicas de diagnóstico por imagem, especialmente a ressonância magnética (RM), são frequentemente diagnosticadas. Recentemente, foi estudado um grupo de pacientes, todos do sexo feminino, com quadro de dor e edema na região do tubérculo ilíaco. A RM ponderada em T2 demonstrava aumento de sinal na entêse da banda iliotibial (BIT) ao longo da margem inferior do tubérculo ilíaco. Relatamos um caso de uma mulher de 34 anos, corredora não profissional, com quadro de dor na crista ilíaca sem história de trauma e cuja RM era compatível com a síndrome da banda iliotibial proximal.

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Introduction

Overload injuries to the hip joint occur commonly among sports practitioners and are now frequently diagnosed because of technical advances in imaging diagnostics, especially magnetic resonance imaging (MRI). Among these injuries, tendinopathy, rupture of the gluteus medius and gluteus minimus, peritrochanteric bursitis, stress fractures and adductor injuries can be highlighted.

Recently, Sher et al. studied a group of patients (all female) with pain and edema in the region of the iliac tubercle was assessed. T2-weighted MRI showed higher signal in the enthesis of the iliotibial band (ITB) along the lower border of the iliac tubercle.

The present study had the aims of reviewing the anatomy of the ITB and raising the possibility of diagnosing proximal ITB injuries in women with hip pain.

Case report

A 34-year-old female patient who was a non-professional 10-kilometer runner, was evaluated at the hip outpatient clinic of EPM/UNIFESP. She had had a complaint of pain in the region of the left ilium for four months, initially at low intensity that did not impede her training, but which progressively intensified and made her running activities impossible two months later. She had sought other services and had been treated as a case of bursitis of the hip.

In the physical examination, there were no abnormalities in either static or dynamic inspection of the left hip. However, there was pain on palpation of the iliac tubercle, and also in Ober’s maneuver and in a test performed in dorsal decubitus with the contralateral hip and knee flexed and the hip of interest in passive external rotation and adduction.

Radiographic examination did not demonstrate any abnormalities and MRI was then requested (Fig. 1).

Enthesitis of the origin of the iliotibial band was diagnosed and this, together with the fact that it was in a woman with the clinical examination described above, was named proximal iliotibial band syndrome.

Treatment with systemic hormonal anti-inflammatory agents was started, given that there was no response to the non-hormonal type, and the treatment was administered in association with specific motor physiotherapy, with analgesic measures and, especially, exercises to stretch the iliotibial band and strengthen the stabilizers of the pelvis and the abdominal and lumbar musculature. This controlled the symptoms and allowed the patient to gradually return to training activities three months after the treatment.

Discussion

There is a discussion in the literature regarding the proximal anatomy of the ITB. There is a description of a proximal insertion in the iliac crest, formed by fusion of the tendon fibers of the gluteus maximus and tensor fasciae latae muscles at the level of the greater trochanter. Other reports have described the ITB...
as a broad fascia with its main insertion in the iliobibial tract and other secondary insertions in the iliac crest.6,7 Sher et al.3 demonstrated that the fascia lata has an insertion along the entire lower border of the iliac crest. At the iliobibial tract, thickening of the fascia lata occurs, with formation of the ITB. This is a fibrous structure of longitudinal orientation that receives contributions from the tendons of the gluteus maximus and tensor fasciae latae muscles at the

investigate the hip but also to cover the entire ilium. If not, the proximal portion of the ITB will not be correctly evaluated.

There has been little discussion about the treatment. All the patients reported in the literature responded to rest and physiotherapeutic treatment for stretching and strengthening the muscles of the ITB.1

The proximal iliobibial band syndrome is a painful hip condition that, although infrequent, needs to be correctly dealt with by general orthopedists. Its diagnosis should be suspected from the clinical picture, especially among women who are runners or obese elderly women, and should be confirmed by means of properly requested MRI.

**Conflicts of interest**

The authors declare no conflicts of interest.

**REFERENCES**


