<https://doi.org/10.47660/CBR.2020.17550>

TRANSIENT BONE MARROW EDEMA SYNDROME – A CASE REPORT

Alisson Regis^{1*}, Mittermayer Santiago¹

1.Universidade Federal da Bahia, Salvador (BA), Brazil.

*Corresponding author: alisson_ios@hotmail.com

BACKGROUND

Bone marrow edema (BME) is the generic term classically used to describe alterations detected on magnetic resonance imaging (MRI) when bone marrow shows decreased signal intensity on T1-weighted sequence and increased signal intensity on T2-weighted imaging. Numerous malignant and benign disorders, including the so-called transient BME syndrome (BMES) can lead to this imaging pattern. The authors present an adult with hip BMES who evolved with spontaneous clinical and radiological resolution after a few months.

CASE REPORT

A 35-year-old Caucasian man came to our outpatient clinic with a four-month history of bilateral hip pain, more intense on the right side, aggravated by physical activity, and relieved on resting. This manifestation started after a nonsupervised intense work-out training. There was no history of pain in any other joints, trauma, alcohol abuse, corticosteroid therapy, or other related illness. On physical examination, there was only a positive Patrick's maneuver of the right hip. Laboratory workup included total white blood counts, HLA-B27 typing, erythrocyte sedimentation rate, and C-reactive protein. All of them were normal. Hip magnetic resonance imaging (MRI) showed high signal intensity on T2-weighted images involving both femoral heads (Fig. 1A and B). He had a diagnosis of BMES and was managed symptomatically with rest, crutches, and pain control. After six months of follow-up, he was in complete clinical remission, and MRI showed almost complete regression of the BME. (Fig. 1C and D).

Figure 1

CONCLUSION

Bone marrow edema syndrome is a rare and self-limited condition characterized by disabling bone pain and increased interstitial fluid within the bone marrow on MRI without a definable cause, particularly in middle-aged men or women during their third-trimester pregnancy. Hip, knee, ankle, and foot bones are the most common sites involved in BMES. It is crucial to draw one's attention to this benign disorder to avoid misdiagnosis and inadequate treatment.