Case Presentation

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A 36-year-old male with no history of trauma sought treatment for left knee pain after physical activity. He reported no pain throughout the dynamic or palpatory maneuvers. Anteroposterior and lateral radiographs of the left knee were requested, and the evaluation was completed with an MRI without contrast medium.

FINDINGS AND INTERPRETATION OF IMAGING STUDIES
The anteroposterior and lateral radiographs of the left knee showed a radiolucent lesion, with a geographic-type pattern and well-defined borders, but without a sclerotic halo, in close contact with the external cortex in the distal metaphyseal-diaphyseal sector of the femur (Figure 1).

Figure 1. Anteroposterior and lateral radiographs of the left knee. Radiolucent lesion, with a type Ib geographic pattern (with defined borders without sclerotic halo), in the metaphyseal-diaphyseal sector, with thinning of the cortex, but without tearing.
In the magnetic resonance of the left knee, bone edema could be observed in the external femoral condyle, with involvement of the metaphyseal and epiphyseal sectors. A hypo-intense lesion was also seen on the T1-weighted sequence (Figure 2A), which appeared slightly heterogeneous on fluid-sensitive sequences, with some septa inside (Figure 2B).

The patient was advised to avoid sports and was prescribed analgesics. The case was brought up before the Musculoskeletal Tumors Committee. A new consultation was scheduled for the patient, and an MRI with contrast medium and computed tomography were ordered.

Figure 2. Magnetic resonance imaging of the left knee without contrast medium. A. Coronal and sagittal sections in T1-weighted sequence. A hypo-intense lesion that contacts the cortex is visualized, no tear is observed. B. Coronal, sagittal, and axial sections in proton density sequences with fat suppression. Significant bone edema (arrow) is visualized with a heterogeneous lesion, predominantly hyperintense, with septa and fluid-fluid levels inside.