Case Presentation

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A 72-year-old man consulted for pain in the left shoulder, predominantly at night, of 5 months of evolution, and inability to carry out overhead movements. He did not report a history of trauma.

Upon physical examination, there were no palpable masses. Both passive and active ranges of motion were decreased, and rotator cuff tests were positive. A radiograph of the left shoulder in internal and external rotation (Figure 1) and an ultrasound of the shoulder (Figure 2) were ordered.

![Left shoulder radiograph](image)

**Figure 1.** Left shoulder radiograph. **A.** Internal rotation: osteoarthritic changes at the glenohumeral and acromioclavicular level, with a decrease in the acromiohumeral space (asterisk). A tumor can be visualized at the metaphyseal-diaphyseal level with a defined proximal limit and little differentiation to the distal (arrows) and radiodense lines inside it, in relation to sclerosis. There is no visible cortical involvement. **B.** External rotation: a calcification can be visualized in the topography of the rotator cuff (arrow).
FINDING AND INTERPRETATION OF IMAGING STUDIES
The left shoulder radiograph showed osteoarthritic changes at the glenohumeral and acromioclavicular levels, with a decrease in the acromiohumeral space. At the metaphyseal-diaphyseal level, a hypodense tumor was visualized, with sclerotic traces inside without cortical perforation. The left shoulder ultrasound revealed complete supraspinatus tear and partial subscapularis tear, with calcification in the infraspinatus topography.

Imaging studies were completed with an MRI of the left shoulder.