

## **Calcific tendinitis with osseous involvement: CASE REPORT**

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### **INTRODUCTION**

Calcific tendinitis is a common cause of shoulder pain, characterized by precipitates of hydroxyapatite crystals. Rarely, these calcifications migrate to other locations, including the bone, and may result in significant bone marrow involvement. Magnetic resonance imaging (MRI) is highly sensitive in detecting bone marrow involvement, but in the presence of focal lesion, cortical erosion and bone inflammatory response, it may not be diagnostic since presence of similar findings are also in osteomyelitic or some bone tumors like periosteal chondroid lesions. We report a case of woman with calcific tendinitis with osseous involvement.

### **CASE REPORT**

A 39-year-old woman presented with a 1-year history of right shoulder pain. A plain radiograph of the right shoulder showed well-defined calcifications overlying head of humerus. Ultrasound guided calcification barbotage was done. The next day, she revisited hospital due to worsening of shoulder pain with elevated body temperature of 37.9°C. Blood tests revealed leukocytosis of 10700 / $\mu$ l and increased inflammatory markers, with a C-reactive protein (CRP) level of 7.3 mg/l. MRI showed calcification between infraspinatus and teres minor and edematous changes in the surrounding tissue and bone marrow. Considering MRI images, elevation of CRP and history of prior invasive procedure, we did not completely exclude the possibility of septic arthritis and decided to undergo diagnostic arthroscopy. Arthroscopic exam showed no definite glenohumeral joint infection sign. Calcium deposits were found between teres minor tendon insertion and infraspinatus tendon insertion. Calcium deposits were removed by arthrocare. Five days after arthroscopic exam, there was no subsequent fever and CRP level dropped from 7.3 to 1.1, so did the WBC level from 10700 to 4170. She discharged with only mild discomfort of right shoulder.

### **CONCLUSION**

In many cases the calcification may be asymptomatic, although calcific tendinitis can be an important cause of severe pain. Fever, local edema and raised inflammatory markers may be present. Occasionally, calcific tendinitis can present with aggressive osseous and soft-tissue changes, which mimic infection or neoplasm, especially on MRI. Thus, it is important to acknowledge bone changes reactive to calcification and make the correct diagnosis in patient with calcific tendinitis.