# ACUTE CALCIFIC TENDINITIS OF THE SHOULDER: WHEN CALCIUM DECIDES TO MIMIC SEPTIC ARTHRITIS

## <u>Diogo Marques</u>, Pedro Rocha, Francisco Moreira, João Pedro Matos, Daniano Caires, Fabiana Rodrigues, Pedro Diogo Silva, Joana Macedo

SESARAM, Portugal e-mail: diogo.antunesmarques@gmail.com

### **Background**

Calcific tendinitis of the shoulder is a self-limiting disorder, it is the calcification and tendon degeneration caused by deposition of calcium hydroxyapatite crystals. Typically affects patients between 30 and 60 years, with a predilection for women. The supraspinatus tendon is most often involved. The supraspinatus tendon is most often involved. In some patients, acute and severe shoulder pain is the first symptom. This acute presentation is traditionally associated with the resorptive phase of the disorder. Symptoms generally resolve in a few weeks of onset. We present a case of acute calcific tendinitis of the shoulder associated with a systemic inflammatory response that mimicked septic arthritis. To our knowledge, only four similar cases have been reported in scientific literature.

### **Case report**

A 75-year old woman with known history of rotator cuff syndrome was admitted to the emergency department with acute and disabling left shoulder pain persisting for over a week along with fever that began the day before. Laboratory tests showed leukocytosis, elevated C-reactive protein (138.33 mg/L; normal <5.00). An ultrasound-guided needle drainage revealed purulent material. A CT-Scan was performed and revealed a 22 mm calcification localized in Subscapularis tendon along with inflammatory changes of the surrounding tissues. Given the concern for septic arthritis the patient was started on Vancomycin and Ceftriaxone. However, cultures of the aspirated material revealed no bacterial growth. After five days the inflammatory markers normalized, and the patient was discharged.

#### **Conclusion**

The resorptive phase of calcific tendinitis is the most symptomatic and may resemble septic arthritis. Usually, the absence of systemic signs and mild elevation of inflammatory markers help differentiate them. However, in a subset of patients, resorption of calcific deposits produces systemic response which may confound the diagnostic process, mislead the treating physician. Awareness may help clinicians to correctly diagnose the patient and avoid unnecessary treatments and procedures.

**Keywords:** Calcific Tendinitis, Suprastinatus, Septic Arthritis