

Synovial chondromatosis of the shoulder

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Section: Musculoskeletal system

Imaging Technique: MR

Case Type: Clinical Cases

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Patient: 28 years, male

Clinical History:

A 28 year old male patient with acute unilateral right shoulder pain.

Imaging Findings:

This 28-year-old male patient presented with an acute painful right shoulder without preceding trauma. Radiography revealed extensive calcifications in peri- and/or intraarticular soft tissue. Subsequently MRI was performed which confirmed synovial effusion with multiple intrasynovial chondromas..

Discussion:

Synovial chondromatosis (SC) is considered to be caused by chondroid metaplasia of the synovial membrane. Large joints such as the knee and hip are most commonly involved. In literature no exact numbers on the incidence of glenohumeral SC are given. The general conclusion is that SC of the glenohumeral joint is rare. The etiology of the disease is still unknown. It may be associated with impingement syndrome, as was the case in this patient with extensive chondromas in the subcoracoid bursa. MR imaging is a valuable tool in detecting SC at an early phase and estimating the intrasynovial extent of the disease. Shoulder arthroscopy represents elegant treatment option for removing the chondromas and performing a partial synovectomy. In this patient it might be insufficient because of involvement of the bicipital tendon sheath.

Differential Diagnosis List: Synovial chondromatosis of the shoulder

Final Diagnosis: Synovial chondromatosis of the shoulder

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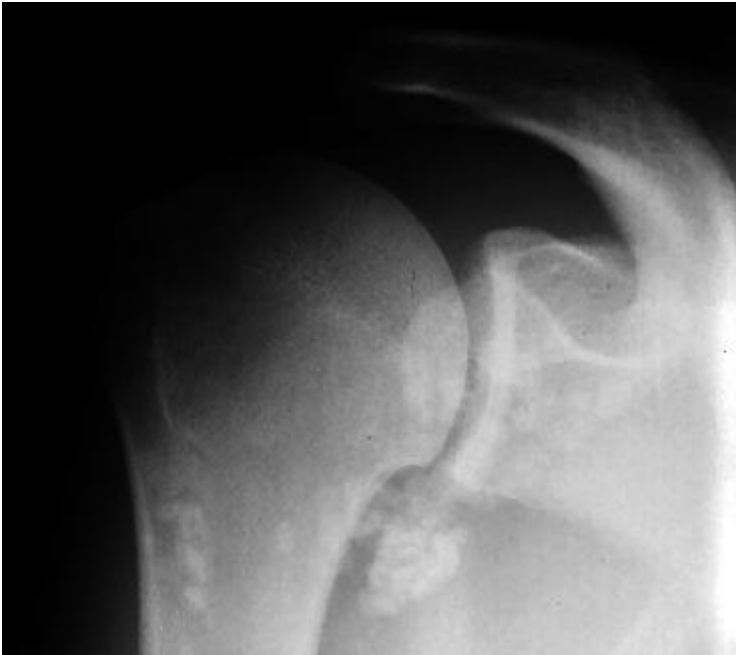
Figure 1

a



Description: Extensive calcifications in subcoracoid bursa and subscapular recess **Origin:**

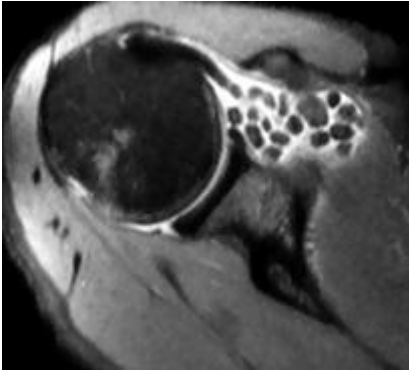
b



Description: Note calcifications in the bicipital tendon sheath **Origin:**

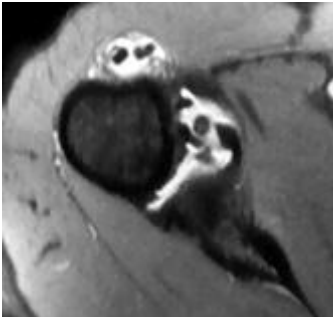
Figure 2

a



Description: Fat-suppressed proton density weighted image axial plane shows synovial effusion with numerous intraluminal chondromas in subscapular recess **Origin:**

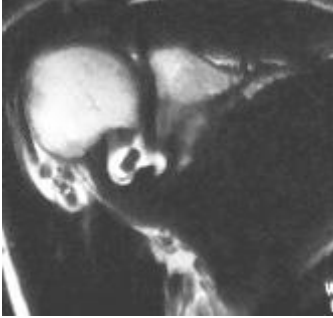
b



Description: Same sequence with chondromas in bicipital tendon. **Origin:**

Figure 3

a



Description: T2 weighted image in coronal plane shows synovial effusion with intraluminal chondromas

Origin: