

Title: Role of Ultrasound imaging in diagnosis of shoulder pain in spondyloarthropathies and rheumatoid arthritis patients

Abstract

Aim of the work: to assess musculoskeletal ultrasound features of painful shoulder in spondyloarthropathies and rheumatoid arthritis patients compared with age and sex-matched healthy controls, and to compare the findings between these two conditions. *Patients and methods:* forty (40) patients were categorized in two subgroups. Twenty (20) rheumatoid arthritis patients and twenty (20) patients of seronegative spondyloarthropathies, in addition to forty (40) control subjects. Musculoskeletal ultrasound was done to all patients and control subjects. *Results:* the patient mean age was 40.22 ± 10.9 years. Twenty-three (23) of them were females (57.5%) and seventeen (17) were males (42.5%). While the controls mean age were 31.65 ± 7.25 years. Twenty-two (22) of them were females (55%) and eighteen (18) were males (45%). *ultrasound findings in study groups:* The most frequent finding in RA and SpA patients was biceps tenosynovitis followed by rotator cuff tendonitis and rotator cuff tears. Biceps tenosynovitis and rotator cuff tendonitis were also reported in control persons. There was a significant difference between rheumatoid arthritis and seronegative spondyloarthropathies patients detected in glenohumeral joint effusion. There was no significant difference as regard physical examination between RA and SpA patients. There was no significant relation between duration of disease & duration of shoulder pain and ultrasonographic findings in rheumatoid arthritis patients. *Conclusion:* Shoulder US has become the modality of choice for the diagnosis of rotator cuff and non-rotator cuff pathologies, offering a high level of diagnostic specificity and sensitivity along with significant benefits to the examiner and the patient.