Osteoarticular Ultrasound for Diagnostic Purposes in the Practice of the Rheumatologist

Authors: A. Ibovi Mouondayi, S. Zaher, K. Nassar, S. Janani

Abstract: Introduction: Osteoarticular ultrasound has become an essential tool for the investigation and monitoring of osteoarticular pathologies for rheumatologists. It is performed in the clinic, cheap to access than other imaging technics. Important anatomical sites of inflammation in inflammatory diseases such as synovium, tendon sheath, and enthesis are easily identifiable on ultrasound. Objective: The objective of this study was to evaluate the importance of ultrasound for rheumatologists in the development of diagnoses of inflammatory rheumatism in cases of uncertain clinical presentation. Material and Methods: This is a retrospective study conducted in our department and carried out over a period of 30 months from January 2020 to June 2022. We included all patients with inflammatory arthralgia without clinical arthritis. Patients' data were collected through a patient operating system. Results: A total of 35 patients were identified, made up of 4 men and 31 women, with a sex ratio M/F of 0.12. The average age of the patients was 48.8 years, with extremes ranging from 17 years to 83 years. All patients had inflammatory polyarthralgia for an average of 9.3 years. Only two patients had suspicious synovitis on clinical examination. 91.43% of patients had a positive inflammatory assessment with an average CRP of 22.2 mg/L. Rheumatoid factor (RF) was present in 45.7% of patients and anti-CCP in 48.57%, with respective averages of 294.43 and 314.63 international units/mL. Radiographic lesions were found in 54% of patients. Osteoarticular ultrasound was performed in all these patients. Subclinical synovitis was found in 60% of patients, including 23% Doppler positive. Tenosynovitis was found in 11% of patients. Enthesitis was objectified in 3% of patients. Rheumatoid arthritis (RA) was retained in 40% of patients; psoriatic arthritis in 6% of patients, hydroxyapatite arthritis, and osteoarthritis in 3% each. Conclusion: Osteoarticular ultrasound has been an essential tool in the practice of rheumatology in recent years. It is for diagnostic purposes in chronic inflammatory rheumatism as well as in degenerative rheumatism and crystal induced arthropathies, but also essential in the follow-up of patients in rheumatology.

Keywords: ultrasound, skeletal, rheumatoid arthritis, arthralgia

Conference Title: ICR 2023: International Conference on Rheumatology

Conference Location : London, United Kingdom **Conference Dates :** February 16-17, 2023