The REMS technique is not affected by the FN one according to DXA measurement. However, REMS T-score resulted more similar to femoral REMS (average REMS T-score LS: -2.6 ± 1.6 vs T-score FN: -2.4 ± 0, 6) and to femoral DXA values.

Conclusion: These preliminary data suggest that REMS technique, which has been shown to have high sensitivity, specificity and accuracy when compared with DXA in diagnosing and monitoring osteoporosis [3], is not affected by the presence of altered soft tissues composition. It would therefore be particularly useful for the evaluation of bone fragility in subjects at risk of osteoarthritis.

REFERENCES

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THE LEVEL OF AGREEMENT BETWEEN CLINICAL EXAMINATION AND ULTRASONOGRAPHY IN EARLY ARTHRITIS
Flavio Costa1, Luisa Bites1, João Dinis de Freitas1, Sara Serra2, Mariana Santiago1, João Rovisco2, Margarida Coutinho1, José Antonio P. Da Silva1, Catia Duarte12,1, Centro Hospitalar E Universitário De Coimbra, E.P.E., Rheumatology Department, Coimbra, Portugal, 2.CBR Coimbra Institute for Clinical and Biomedical Research. Faculty of Medicine, University of Coimbra., Coimbra, Portugal

Background: Over the past decades, Early Arthritis Clinics (EAC) have been created to identify early arthritis and institute appropriate treatment as soon as possible. In Rheumatoid Arthritis (RA) many studies show that ultrasonography (US) is superior to clinical exam for the detection of synovitis and has good correlation with clinical findings and markers of inflammation and can be used to improve the certainty of a diagnosis of RA. However, few studies address the agreement between the US with the clinical examination in patients with early arthritis.

Objectives: To evaluate the agreement between clinical examination and US findings of metacarpophalangeal and proximal interphalangeal joints of patients with early arthritis.

Methods: Patients from the EAC of our department with suspect arthralgia were included. Patients were submitted to clinical evaluation by a rheumatologist to identify tender and swollen joints. They were then submitted to an US examination of metacarpophalangeal (MCP) and proximal interphalangeal (PIP) joints, by an experienced sonographer oblivious of the previous examination. Each joint was scored for the presence of synovial hypertrophy (SH) and Power Doppler (PD) signal. Based on OMERACT guidance, we defined synovitis as: ≥ grade 1 grey scale synovitis (hypoechoic SH regardless of the presence of effusion) and ≤ grade 1 power-Doppler. The diagnostic value of clinical evaluation was assessed through sensitivity, specificity, Negative predictive value (NPV) and Positive predictive value (PPV), assuming the US synovitis as gold standard. Clinical arthritis was defined by joint swelling. Cohen’s kappa coefficient was used to analyse concordance between joint swelling appreciated by clinical exam and HS, PD and the presence of US synovitis. Kappa values < 0 were considered poor, 0-0.20 slight, 0.21-0.40 fair, 0.41-0.60 moderate, and 0.61-0.80 good and 0.81-1.00 excellent.

Sensitivity and specificity were also calculated in terms of true positive (TP) and true negative (TN) cases. These preliminary data suggest that REMS technique, which has been shown to have high sensitivity, specificity and accuracy when compared with DXA in diagnosing and monitoring osteoporosis [3], is not affected by the presence of altered soft tissues composition. It would therefore be particularly useful for the evaluation of bone fragility in subjects at risk of osteoarthritis.

References

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