MExNvoxels.² Correlation between all clinical scores and all imaging parameters was done using Spearman rho, with significance levels of $p < 0.05$.

Results: The imaging markers of perfusion in the synovium of the knee (MExNvoxels and IREXNvoxels) were the only imaging measures, which showed a very high association with CRP in both RF + RA ($r = 0.92/0.97$, $p < 0.05$) and PsA patients ($0.93/0.99$, $p < 0.05$), whereas all other imaging markers of inflammation showed no statistical association with blood levels of CRP in these diseases. We found no association between CRP and any imaging assessed scores of inflammation in either RF- RA or OA. In addition, only RF + RA patients showed a positive moderate to high association between MExNvoxels and IL-6 ($r = 0.66$, $p < 0.05$) in the knee joint aspirate.

Conclusions: Quantitative imaging and blood biomarkers of inflammation, such as DCE-MRI parameters and CRP, appear to relate differently to each other in the four most common knee arthritic diseases, RF + RA, RF- RA, PsA and OA. DCE-MRI may have specific utility in differentiating these conditions and their disease activity.

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AB1207

CORRELATION BETWEEN CLINICAL FINDINGS AND ULTRASONOGRAPHY IN EVALUATING PAINFUL RHEUMATOID SHOULDER

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Background: Shoulder pain is one of the most common complaints encountered in patients with rheumatoid arthritis (RA) ¹. In recent years ultrasonography (US) became an essential tool in diagnosing rheumatic diseases ². As clinical examination often does not allow an exact diagnosis, the agreement between both methods needs to be discussed to know how much the US add benefits to clinical examination.

Objectives: To determine the agreement between clinical examination and ultrasound in evaluating shoulder pain in rheumatoid.

Methods: A cross-sectional study including thirty RA patients, meeting the ACR/EULAR classification criteria for RA complaining of shoulder pain. They were recruited from rheumatology outpatient clinic in Mansoura University Hospitals. The sixty shoulders of the thirty patients were examined clinically by inspection, palpation and special tests, then fully examined by ultrasound including biceps tendon, subacromial bursa, rotator cuff tendons and acromioclavicular joint.

Results: Agreement among clinical examination and US was examined using Cohen's kappa. There was slight agreement between clinical examination and US regarding biceps tenosynovitis with $k = 0.206$, fair agreement regarding acromioclavicular osteoarthritis with $k = 0.392$ and SASD bursitis with $k = 0.233$. There was also moderate agreement between clinical examination and US examination of the shoulder in case of supraspinatus tendinopathy with $k = 0.464$. Data were statistically significant ($p < 0.001$). The overall agreement between clinical examination and ultrasound was poor.

Conclusions: Clinical examination of shoulder pain in rheumatoid arthritis is not accurate, insufficient. It should be confirmed with US examination during the initial evaluation of the shoulder to give reliable data and differentiate between different pathologies.

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AB1208

THE ROLE OF ULTRASOUND IN THE DISCOVERY OF INTERSTITIAL CHANGES IN THE LUNGS IN PATIENTS WITH SYSTEMIC CONNECTIVE TISSUE DISEASE

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Background: Interstitial lung disease (ILD) is one of the most serious lung complications in patients with connective tissue disease (CTD), most commonly in patients with systemic sclerosis (SSc). High-resolution Computed Tomography is a gold standard for assessing ILD. Ultrasound examination of the lungs has been increasingly used lately to evaluate the existence of interstitial changes (B lines) in the lungs.

Objectives: To determine whether there is a significant difference in the presence of B lines on lung ultrasound examination in patients with SSc compared to patients with other CTD and healthy controls. Also, to investigate if there is a significant difference in the presence of B lines on lung ultrasound examination in patients with diffuse SSc compared to patients with limited SSc.

Methods: The study included 150 people of both sexes, aged between 19 and 81, who were examined at the Institute of Rheumatology in Belgrade. In the first group there were 55 patients with SSc (28 with diffuse and 27 with limited form of SSc), in the second group 45 patients with other CTD (16 with rheumatoid arthritis, 16 with systemic lupus erythematosus and 13 with Sjogren syndrome) and in the third group 50 healthy subjects who were matched by gender and age with other two groups. At the ultrasound examination, the number of B lines was determined in all segments of the lungs. A positive ultrasound finding was considered to be one with 3 or more B-lines in at least two adjacent ultrasound scanning fields or one with more than 5 B-lines in any single field of ultrasound scanning.

Results: There was statistically significant difference in positive findings between the group of subjects with SSc and the group of healthy subjects (65,5% vs. 2%; $p < 0.001$) and between the group of subjects with SSc and the group with other CTD (65,5% vs. 13,3%; $p < 0.001$). Also, it was shown that there was statistically significant difference in positive findings between the group of subjects with diffuse SSc and the group with limited SSc (85,7% vs. 44,4%; $p < 0.001$).

Conclusions: The conducted study confirmed that the presence of B lines on lung ultrasound examination is significantly more frequent in patients with SSc, especially in the patients with diffuse SSc.

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AB1209

USEFULNESS OF IMAGENOLOGY TO DIFFERENTIAL DIAGNOSIS IN PATIENTS WITH PRESUMED SERONEGATIVE RHEUMATOID ARTHRITIS AND OTHER ARTHROPATHIES

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Background: It is difficult to make a differential diagnosis between seronegative RA and other inflammatory arthropathies. Many patients could be wrong diagnosed followed of expensive treatments.

Objectives: To assess the usefulness of X-rays of hands and feet (X-rays), Ultrasound (US) and Magnetic Resonance Imaging (MRI) to discard false positive diagnosis of seronegative RA from real-world evidence.

Methods: An analysis from medical records of patients with presumptive seronegative RA diagnosis reportedly seronegative for both rheumatoid factor and anti-cyclic citrullinated peptide antibodies and clinical criteria of RA, in the period between July 2016 and ; June of 2017 who were assessed by imagenology (X-rays, US or MRI) in a centre of rheumatoid arthritis to confirm diagnosis or discard it. Laboratory, and imagenology data was retrospectively analysed and multivariate analysis was performed to determinate the usefulness of imagenology.

Results: 360 patients were received in the centre with presumptive diagnosis of RA in the period, mean of age was 58 years, 80,9% females and 19,1% males. X-