Cox multivariate analysis identified that presence PD-synovitis at baseline was associated with risk of radiographic progression at 4 years (HR 3.68 95% CI 1.03–11.6, p = 0.045).

Conclusion: Thus, PD-synovitis has a prognostic value for increasing destructive radiographic changes.

References: no

Disclosure of Interests: None declared

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AB1076

COLOR DOPPLER HIGH- FREQUENCY ULTRASOUND OF DIGITAL ARTERIES IN PATIENTS WITH SYSTEMIC SCLEROSIS

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Background: Systemic sclerosis (SSc) can lead to vascular complications such as digital ulcers or pitting scars (DU/PS). These changes develop in most patients with SSc and exacerbate their condition. However, there are no methods for dynamic assessment of the vascular involvement. The dynamics of capillaroscopic changes is very slow.

Objectives: The aim of the study was to compare blood flow parameters of digital arteries in SSc patients and healthy individuals and to compare with nailfold capillaroscopy and clinical signs of ischemia.

Methods: 32 SSc patients, mean age 49.5 (42.0; 59.0) yrs and 26 ‘healthy’, mean age 43.5 (33.0; 57.0), were included. Groups of patients differed by gender and age. The exclusion criterion was the presence of obliterating vascular disease of the upper extremities. An Esaote MyLab Twice US system with 22 MHz linear probe was used. A total of SSc patients and controls underwent Color Doppler Ultrasonography (CDUS) of 376 (256 + 208) digital arteries to compare blood flow velocity, resistive indices (RIs) and presence of occlusion. Nailfold capillaroscopy, clinical and laboratory data were also evaluated.

Results: In digital arteries, pulsatility index (PI), peak systolic velocity (PSV) and end-diastolic velocity (EDV) were significantly lower and RI higher in SSc patients compared with controls (PSV: 13.28 [9.88; 16.7] vs 17.45 [12.65; 22.5], p<0.005; PI: 1.73 [1.32; 2.19] vs 1.22 [0.99; 1.55], p<0.002).

Conclusions: Blood flow is significantly decreased in digital arteries in SSc, but clinical features of vasculopathy depend on microcirculatory disorders. It is important to continue research to find methods for dynamic evaluation of microcirculatory changes.

References: no

Disclosure of Interests: None declared

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AB1077

VALIDATION OF A SIMPLIFIED SPANISH TOOL FOR SEMI-AUTOMATED QUANTIFICATION OF SACRIFICIAL INFLAMMATION BY MAGNETIC RESONANCE IN SPONDYLOARTHROPATHIES (S-SCAIISS)

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Background: To improve quantification of sacroiliac (SI) joints, combining semi-axial and semi-coronal slices [1]. The 2009 ASAS definition of active sacroilitis was based on standard semi-coronal slices only, perpendicular semi-axial slices being considered but optional [2]. We hypothesized a simplified SCAIISS (s-SCAIISS) method using only semi-coronal slices.

Objectives: To validate the feasibility and accuracy of a simplified Spanish tool for semi-automated quantification of sacroiliac inflammation by magnetic resonance in spondyloarthropathies (s-SCAIISS) using a semi-coronal scan instead of combining semi-axial and semi-coronal slices.

Methods: The s-SCAIISS was designed as an image-processing software. We performed the following analysis: (1) three readers evaluated SI images of 23 patients with axial SpA and various levels of BME severity with the s-SCAIISS and SCAIISS, and two non-automated methods, SPARC and Berlin; (2) 20 readers evaluated 12 patients images, also with the three methods. Convergent validity, feasibility and reliability were estimated.

Results: The interobserver reliability of ICC and in the three observers’ study was: s-SCAIISS = 0.69 (0.490–0.845); SCAIISS= 0.770 (0.580–0.889); Berlin = 0.725 (0.537–0.860); and SPARC = 0.824 (0.671–0.916). In the 20 observers’ study, ICC was: s- SCAIISS = 0.66 (0.478–0.863); SCAIISS = 0.801 (0.633–0.927); Berlin = 0.702 (0.518–0.882); and SPARC = 0.790 (0.623–0.923). Spearman correlation coefficient between s- SCAIISS_BERLIN was r= 0.712 and s- SCAIISS_SPARC was r= 0.779 and s- SCAIISS_SCAIISS was r= 0.90. Similar results showed SCAIISS_BERLIN and SCAIISS_SPARC (r= 0.729 and 0.840), respectively.

Conclusion: The simplified SCAIISS (s-SCAIISS) using only semi-coronal slice permits a valid, reliable, and fast calculation of overall BME lesion at the SI joint.

References:


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AB1078

USE OF MYOSITIS SPECIFIC AUTOANTIBODIES TESTING ACROSS A LARGE NHS HOSPITAL TRUST

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Background: The immunology laboratory at Barts Health supports a large clinical myopathy service, providing blood tests for myositis-specific autoantibodies (MSA) by a commercial line immunoblot panel for Jo1, PL7, PL12, SRP, Mi2, Ku, PM-Scl and Scl-70.

As idiopathic Inflammatory Myositis (IMM) disease subtype definitions have evolved from the 1975 Bohan & Peter criteria, the discovery of new antibodies has proven useful in the hands of neuromuscular clinicians whose patients have a high pre-test probability of disease. Ready availability of the test has led to increased demand from:
1. Respiratory physicians with patients with severe Intstitial Lung Disease (ILD) which can be a symptom of some IIMs.
2. The connective tissue disease (CTD) screening section of the laboratory in which many patients are screened for antinuclear antibodies (ANA), which occasionally produces a pattern that may be associated with an MSA.

Objectives:
1. Determine the frequency of MSA requests from different departments.
2. To investigate the possibility of rejecting requests for MSAs at the laboratory in the absence of an elevated creatine kinase (CK), a hallmark of muscle damage associated with myositis.

Methods: MSA were measured by a commercial line blot (Bluedyer) which included Jo-1, PL7, PL12, Mi2, Ku, SRP-54 and PM-Scl-100. Demographics and results for all MSA requested between September 2017 and November 2019 were pulled from laboratory records, together with CK results (if performed). CK was interpreted as low, normal or elevated according to reference ranges of 25-200U/L (female) or 40-320U/L (male).