Results: Sixty-two consecutive ERA patients and 34 CTR were included in this study. Mean age and gender distribution were comparable between ERA and CTR (47,3±14,5 vs. 43,4±12,5). ACPA were present in 61%, rheumatoid factor in 54%, and bone erosions in 27% of ERA patients. 57% of ERA patients presented with FET and 0% of CTR ($p<0.001$). The delay between the first symptom and diagnosis, the DAS28CRP, SDAI, CDAI, CRP level, 44TJC, 44SJC, HAQ did not differ significantly between patients with FET involvement and those without. In univariate analysis, the presence of FET involvement was significantly associated with the presence of bone erosions ($p=0.02$), ACPA ($p=0.002$), rheumatoid factor ($p=0.02$) and tobacco use ($p=0.02$). In multivariate analysis, the presence of FET involvement was significantly associated with the presence of bone erosions ($p=0.01$), ACPA ($p=0.001$), RF ($p<0.01$).

Conclusion: FET is relatively frequent in ERA patients and it is not present in asymptomatic subjects. Our results show that FET involvement is associated with the presence of ACPA, rheumatoid factor and bone erosions, thus identifying patients with possibly more aggressive or severe disease at baseline.

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THU0615

POSITIVE MRI OF THE SPINE AS IMAGING CRITERION IN THE ASAS CLASSIFICATION CRITERIA FOR AXIAL SPONDYLOARTHRITIS

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Background: MRI is a useful tool for the evaluation of patients with chronic back pain suspected of axial spondyloarthritis. As defined by ASAS classification criteria, MRI suggestive of axial spondyloarthritis is based on the presence of inflammatory lesions in the sacroiliac joints. However inflammatory lesions in the spine may also occur. A consensus definition for a positive MRI-spine was developed by OMERACT MRI working group. In this consensus a positive MRI-spine is described as the presence of ≥ 3 inflammatory lesions in the corner of the vertebrae (bone marrow edema lesions), whereas each lesion needs to be present on ≥ 2 consecutive slices.

Objectives: The purpose of this study was to evaluate the presence of spinal inflammatory lesions on MRI performed between January, 2015 and December, 2015 in the Universidad de Chile Clinical Hospital.

Methods: Data from MRI performed between January, 2015 and December, 2015 in the Universidad de Chile Clinical Hospital was collected. The patients were derived by a physician as part of the study of chronic back pain.

Results: A total of 118 MRI were performed in this period, from which 8 showed evidence of spinal involvement without sacroileitis. The finding in MRI were: 3 patients with enthesitis of spinal ligaments, 2 patients with spondylodiscitis and 3 patients with bone marrow edema in the corner of the vertebrae. However, no patients fulfilled the OMERACT criteria for a positive MRI-spine (≥ 3 corner based inflammatory lesions). Patients with inflammatory lesions in the corner of vertebrae only showed 1 or 2 bone marrow edema sites. When we hypothetically added this criteria (assuming 2 bone marrow edema sites as a positive MRI-spine) to the ASAS-criteria for axial spondyloarthritis, only one patient could be classified via the imaging arm.

Conclusion: Adding a positive MRI-spine as an imaging criterion to the ASAS-criteria for axial spondyloarthritis did not resulted in newly classified

patients in this cohort. A combination of MRI-spine and MRI-SI had no incremental value compared with MRI-SI alone.

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THU0616

WHOLE-BODY MRI OF PSORIATIC ARTHRITIS AND RHEUMATOID ARTHRITIS PATIENTS AND HEALTHY CONTROLS – INTERSCAN, INTRAREADER AND INTERREADER AGREEMENT AND DISTRIBUTION OF FINDINGS

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Background: Whole-body MRI (WBMRI) is a promising tool for monitoring disease activity in inflammatory joint diseases. Earlier studies have shown good correlation with conventional MRI and scoring systems for WBMRI have been developed [1,2]. However, the validation of WBMRI is limited; no studies have evaluated the agreement between repeated scans (interscan agreement) and only few studies have evaluated the intra- and interreader agreement.

Objectives: To validate WBMRI by evaluating the interscan agreement in patients with psoriatic arthritis (PsA), rheumatoid arthritis (RA) and healthy controls (HC) and to evaluate the intra- and interreader agreement and determine the distribution of pathologies in the subjects.

Methods: WBMRI was performed twice with a one-week interval in 14 patients with PsA, 10 with RA and 16 HC. Coronal images of shoulders, hips, hands and ankles/feet, and sagittal images of knees, ankles, feet and spine were obtained (STIR and pre- and post-contrast T1 weighted spin echo images). Images were anonymized and read in pairs with unknown chronological order by experienced readers (peripheral: IE; spine: SK). WBMRI was scored for 83 peripheral joints and for 33 peripheral entheses according to the OMERACT WBMRI scoring system [1], and according to the CanDen MRI spine scoring system [2]. Ten image sets were re-anonymized for assessment of intra- and interreader agreement (peripheral and spine: MO). Agreement was calculated on lesion level by percentage exact agreement (PEA) and Cohen's kappa with squared weights, and for sum scores by absolute agreement single-measure intraclass correlation coefficient (ICC).

Results: The age in the PsA/RA/HC was median (range) 48(31-68)/49(26-58)/35(23-54) years and the symptom duration 10(0-24)/7(3-24)/NA years. WBMRI of the spine and peripheral joints and entheses generally showed moderate to almost perfect interscan agreement with a PEA ranging from 95-100%, kappa ranging from 0.71-1.00 and ICC ranging from 0.95-1.00 (Table 1). Intra- and interreader agreement showed moderate to almost perfect agreement with few exceptions (Table 2).

More lesions were found in patients than HC. PsA patients had more lesions in acromioclavicular and sternoclavicular joints, whereas RA patients had more hand lesions (Figure 1). PsA patients had more lesions in the spine (Figure 2).

Conclusion: WBMRI of the spine and peripheral joints and entheses showed very good interscan agreement, implying that repositioning between examinations does not markedly affect scoring of lesions. Intra- and interreader agreement showed moderate to almost perfect agreement. The distribution of findings in PsA, RA and HC was determined.

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