

Methods: Data were obtained from 670 patients with SLE from Department of Rheumatology and immunology in our hospital between January 2012 and October 2016. All patients fulfilled the 1997 ACR SLE classification criteria. Data about their gender, age, ethnic groups and result of antibodies test were collected. **Results:** Totally 670 completed data were collected, there are 438 (65.37%) of these patients (68.22%) were Han population, 136 (20.29%) were Uighur, 43 (6.42%) were Kazakh, 30 (4.48%) were Hui people and 23 were other minorities live in Xinjiang. The titer of ANA was higher in minorities than Han population ($Z=3.516$, $P<0.01$). As compared with Han population, the positive rate of anti-Smith antibodies and anti-SSA antibodies in SLE patients, significantly higher than Han population ($\chi^2=5.902$, $P<0.017$; $\chi^2=42.787$, $P<0.001$, respectively). However, there are no significant difference of the positive rate of anti-SSA antibodies, anti-Scl-70 antibodies, anti-Jo-1 antibodies, anti-ds-DNA antibodies between Han population and minorities.

Conclusions: Distributions of antibodies in SLE patients were different between Han population and minorities, the positive rate of anti-Smith antibodies and anti-SSA antibodies in SLE patients were significantly higher than Han population. **Disclosure of Interest:** None declared

DOI: 10.1136/annrheumdis-2017-eular.6291

AB1009 MRI CONTRIBUTES TO ACCURATE DIAGNOSIS OF NON-RADIOGRAPHIC AXIAL SPONDYLOARTHRITIS IN PATIENTS WITH SERUM NEGATIVE HLA-B27

C.-C. Lu^{1,2}, G.-S. Huang³, H.-C. Chen¹, T.S.-H. Lee⁴, F.-C. Liu¹, S.-Y. Kao¹, S.-J. Chu¹, T.-Y. Ho¹, C.-H. Chen⁵, S.-Y. Lyu⁶. ¹Division of Rheumatology, Department of Internal Medicine, Tri-Service General Hospital, National Defense Medical Center, Taipei City, Taiwan, Province of China; ²Department of Pathology, University of Washington, Seattle, United States; ³Department of Radiology, Tri-Service General Hospital, National Defense Medical Center; ⁴Department of Health Promotion and Health Education, National Taiwan Normal University, Taipei City; ⁵Division of Rheumatology, Department of Internal Medicine, Taipei Tzu Chi Hospital, New Taipei City; ⁶Division of Radiology, Taoyuan General Hospital, Ministry of Health and Welfare, Taoyuan City, Taiwan, Province of China

Background: Based on ASAS axial spondyloarthritis (SpA) criteria, the presence of structural changes of sacroiliac (SI) joints such as sclerosis, bone erosion, joint space widening or ankyloses does not meet the definition of active sacroiliitis on magnetic resonance imaging (MRI), if there is no bone marrow edema (BME). However only less than half Asian patients with SpA were characterized by BME. Neither serum inflammatory markers such as C-reactive protein (CRP) nor erythrocyte sedimentation rate (ESR) is able to be useful as diagnostic markers in the early phase of SpA. HLA-B27 is associated with early diagnosis of SpA and axial inflammation of SI joints on MRI. Nonetheless, HLA-B27 is not associated with structural lesions of SI joints. All factors contribute to difficult defining early Asian SpA patients in the absence of serum HLA-B27 and active imaging inflammation.

Objectives: The aim of this study is to evaluate the prevalence of structure changes of SI joints on MRI in Taiwanese SpA patients in the absence of serum HLA-B27.

Methods: Thirty-three patients with inflammatory back pain and morning stiffness (disease duration more than 3 months) and high disease activity (BASDAI \geq 4) who had to be either serum HLA-B27 positive (10 patients) with \geq 1 SpA-feature or HLA-B27 negative with \geq 2 SpA-features (22 patients) were included in this prospective study. All patients did not meet the definition for a positive radiograph according to the modified New York criteria. MRI was performed with multiple sequence (Coronal and axial T1-weighted spin echo, coronal and axial short-tau inversion recovery). SI joints were evaluated for the prevalence of subchondral BME and structure changes (sclerosis, bone erosion, joint space widening and ankylosis). All patients were tested for X-rays of the pelvis and serum levels of ESR and CRP. Correlation analysis was performed among the different collected variables.

Results: Subchondral BME was only present in 8 of 23 patients with SpA in the absence of serum HLA-B27 (34.8%), while 7 of 10 (70%) HLA-B27 serum positive SpA patients had active BME on MRI. Structural changes of SI joints, including sclerosis, bone erosion and joint space widening were identified in 8 (80%), 10 (100%) and 5 (50%) SpA patients with positive serum HLA-B27, respectively. Nevertheless, these structural changes of SI joints on MRI were more common in HLA-B27 serum negative patients, as 15 (65.2%), 20 (87.0%) and 7 (30.4%) of 23 serum negative patients, respectively.

Conclusions: MRI contributes to detect structural changes of SI joints for patients with nonradiographic axial SpA in the absence of serum HLA-B27.

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Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.6069

AB1010 ULTRASOUND MORPHOSTRUCTURAL PATTERN OF THE TIBIOFIBULAR JOINT. PRELIMINARY RESULTS

C. Hernández-Díaz¹, L. Ventura-Ríos¹, M. Maldonado², G. Sanchez-Bringas³. ¹Laboratorio de Ultrasonido Musculoesquelético y Articular, Instituto Nacional de Rehabilitación, Mexico City, Mexico; ²Reumatología, Cuzco, Peru; ³Departamento de Embriología, Facultad de Medicina, UNAM, Mexico City, Mexico

Background: The anatomy of the proximal tibiofibular (TF) joint is directly related to its ability to withstand stress applied in either a longitudinal or axial fashion. It is traditionally evaluated by CT scan, however, in certain conditions, it could be evaluated by ultrasound (US) conveniently; so far US has not been used to evaluate the TF joint. US is an innocuous, accessible and cheap image technique, that has demonstrated its utility for evaluating joints in several pathologic conditions, and might have an important role in the early diagnosis of inflammatory, degenerative or even tumoral lesions at the level of the TF joint; there are no studies that have evaluated the morpho-structural pattern of the TF joint.

Objectives: To describe the morphostructural pattern of the tibiofibular joint in healthy subjects.

Methods: Subjects older than 18 yrs old, with no history of past/present lesion of the knee, without any joint or neurovascular disease were included. A short questionnaire related to physical activity applied, and clinical evaluation to discard instability performed. US of both knees in extension done, using an Esaote® MyLab 70 ultrasound equipment with a 7.5–12 MHz linear transducer. Descriptive statistics done

Results: Thirty-six patients (27 women, 75%) included, mean age 41.2±8.9 years, mean weight 71±12.46 kg, mean height 1.61±0.09 ms and BMI 21.07±12.40. 69% of the subjects practice mild exercise activities. By US mean distance between tibia and fibula were 3.2±1.17 cm; the mean thickness of the ligaments (superior and inferior) was 3.2±0.99 cm and 3.2±0.89 respectively, and in the superior e inferior fibular ligaments were 3.2±0.99 cm and 3.2±0.89 cm respectively. Ligaments were hyperechoic in 61.1%, a well-defined border was seen only in 48.6%. Inside of joints a hypoechoic tissue was observed

Conclusions: These preliminary results suggest that US can be a useful tool for evaluating the tibiofibular joint.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.6840

AB1011 RELIABILITY OF SONOGRAPHIC PERITENON EXTENSOR TENDON INFLAMMATION PATTERN IN PSORIATIC ARTHRITIS

C. Macía¹, H.B. Hammer², S. Falcao³, J. Medina⁴, M. Gutierrez⁵, E. De Miguel⁶. ¹Rheumatology, Hospital Universitario Severo Ochoa, Madrid, Spain; ²Rheumatology, Diakonhjemmet Hospital, Oslo, Norway; ³Rheumatology, Chronic Diseases Study Center (CEDOC), NOVA Medical School, UNL, Lisboa, Portugal; ⁴Rheumatology, Hospital Clínico Universitario, Valladolid, Spain; ⁵Rheumatology, Division of Musculoskeletal and Rheumatic Disorders, Instituto Nacional de Rehabilitación, Mexico City, Mexico; ⁶Rheumatology, Hospital Universitario la Paz, Madrid, Spain

Background: Preliminary results demonstrate that the peritenon inflammation of the extensor digitorum tendon (PTI) is a specific ultrasound (US) pattern of Psoriatic Arthritis (PsA) at metacarpophalangeal joint (MCPJ) level. It was suggested as a pattern playing a key role in the differential diagnosis between Rheumatoid Arthritis and PsA^(1,2).

Objectives: In spite of PTI's clinical impact, there are no data regarding the reliability of US PTI evaluation. The present study addressed this topic by testing the reliability of US on evaluation of PTI.

Methods: 27 consecutive non selected PsA patients with clinical involvement of at least one 2nd to 5th MCPJ were included. A rheumatologist trained in PTI assessments obtained the US images exploring the dorsal aspect of MCPJ from 2nd to 5th of both hands using a MyLab 70 XVG machine, Esaote, Genova, Italy, with a greyscale (GS) 13 MHz probe and a 7.1 MHz power Doppler (PD) frequency, PRF 750 Hz and a 60 Gain. 3–5 seconds videos of each MCPJ were obtained in transversal and longitudinal views for further reliability analysis. In the inter-reader reliability analysis, performed by five readers from five different hospitals and four countries, it was scored as present or absent 1) PTI (defined as an hypoechoic swelling of the soft tissue surrounding the extensor tendon at MCPJ level with or without PD) and 2) intra-articular synovitis (IAS, OMERACT definition), both in PD and GS. The consensus of true US results for every joint and lesion was achieved when at least three readers had the same opinion. Cohen's Kappa test was used for statistical analysis.

Results: Clinical MCPJ involvement was present in 60 (27.7%) of the 216 joints whereas US detected IAS and/or PTI in 75 (34.7%). US showed GS PTI in 41 (19%) and PD in 38 (17.6%) of the joints, while GS IAS was found in 63 (29.2%) with PD activity in 41 (19%) of the joints. The inter-reader reliability is shown in the Table. Intra-reader reliability results expressed as mean Kappa were 0.826 for PTI PD, 0.784 for PTI GS, 0.743 for IAS PD and 0.637 for IAS GS.

Conclusions: US examination of MCPJ shows that PTI is near as frequent as IAS in PsA with reliability of its scoring at least as good as for joint synovitis. This opens the possibility of introducing US scoring of PTI, which may be of importance for the diagnosis and follow-up of PsA patients.

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