Abstract AB0219 – Figure 1

Conclusions: This small real-world retrospective, observational, cohort study demonstrates that early diagnosis of RA provides higher retention rate of anti-TNF-alpha treatment as first-line bDMARD.

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AB0220

SERONEGATIVE RA GROUP HAD Milder SYNOVITIS AND DELAYED PROGRESS OF BONE EROSION THAN SEROPOSITIVE RA ON WRISTS AND HANDS IN DMARDS-NAÏVE CHINESE COHORT

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Background: Contrast to sp-RA, sn-RA was less studied. The report by Nordberg et al mentioned ultrasonographic presentations for the first time. They declared early RA patients (with the duration <2 years) without the treatment of DMARDs had more severe synovitis than sp-RA. However, according to the criteria, for the diagnosis of sn-RA, more than 10 swollen joints is necessary. The huge gap of swollen joints counts (SJC) between two groups may influence the sum ultrasound scores and thus cause a prominent selective bias, which was questioned to affect the fact that sn-RA had more synovitis due to more joints involved relative to grouping rules.

Objectives: To investigate and compare the disease progress of seronegative Rheumatoid arthritis (sn-RA) and seropositive Rheumatoid arthritis (sp-RA) on typical sites including wrists and hands by means of ultrasound and x-ray in Chinese patients.

Methods: All cases were DMARDs-naïve (DMARDs) and conformed to 2010 classification criteria with the characteristics of abnormal swollen or pain in wrists, Proximal Interphalangeal (PIP), Metatarsophalangeal (MCP) joints. 5-joints ultrasound scoring system was improved from Backhaus's US7 scoring system. Erythrocyte sedimentation rate (ESR, mm/h), C reactive protein (CRP, mg/L), Visual analogue scale (VAS) scores (VASs), patient global assessment of disease activity on VASs (PGA), the physician's assessment of disease activity on VASs (PhGA), DAS28 (Disease Activity Score-28, DAS28), van der Heijde-modified Sharp scores (vdHSS) were also used to evaluate the disease activity among 1 Group A: sp-RA (positive rheumatoid factor (RF) and/or anticitrullinated peptide antibody (ACPA)) combined with swollen joint counts (SJC) > 10; 2 Group B: sp-RA combined with SJC ≤ 10 and 3 Group C: sn-RA (negative RF and negative ACPA), according to the 2010 criteria with SJC > 10.

Results: 29 (11.6%) of 249 patients were seronegative. The score of DAS28, CRP, ESR, the sum ultrasound scores, vdHSS, physician global VAS, Patient global VAS and pain VAS were significantly lower ($p < 0.05$) in Group C than Group A, but no difference between Group B and Group A. The sum ultrasound scores were prominently lower in Group C with the duration over 2 years ($p < 0.05$), and vdHSS were remarkably higher in all groups with the duration over 5 years, but more specifically, for the duration over 2 years ($p < 0.05$), the vdHSS was shown to go up much more earlier in sp-RA than sn-RA patients.

Conclusions: Seronegative RA group had milder synovitis and delayed progress of bone erosion than seropositive RA on hands and wrists at the same level with SJC > 10.

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AB0221

THE USE OF ULTRASOUND TO IDENTIFY DISEASE ACTIVITY IN PATIENTS WITH RHEUMATOID ARTHRITIS IN CLINICAL REMISSION OR LOW DISEASE ACTIVITY IN A REAL-LIFE SETTING

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Background: The goal of treatment in rheumatoid arthritis (RA) is to achieve remission or low disease activity for as long as possible, in order to prevent joint damage and loss of function. The evaluation and follow-up of disease activity relies on composite indexes with clinical outcomes. However, many studies have shown that a high proportion of patients categorised on remission or low disease activity by clinical methods could have disease activity by ultrasound (US).¹

Objectives: The aim of this study was to evaluate disease activity by US in patients classified as to be in remission or in low disease activity disease activity by clinimetric evaluation.

Methods: We performed a cross-sectional study including patients with RA; Clinical follow-up was designed by the authors according to DAS28 as follows: every 3–5 weeks (DAS28 > 5.1), every 7–9 weeks (DAS28 ≥ 3.1 and ≤ 5.1), and every 11–13 weeks (DAS28 < 3.1). Additionally the patient was evaluated by a rheumatologist expert in ultrasound; US studies were carried out with a Esaote MyLab Seven US equipment (Biomedica, Genoa, Italy) equipped with a 10–18 MHz linear transducer; PD was adjusted according to the following parameters: frequency, 8.0, PRF, 0.500, wall filter 3, gain between 50 and 70. The rheumatologist reported erosions, synovitis, osteophytes and power Doppler, we defined as active disease when patients had synovitis or positive power Doppler. We calculated means, and standard deviations for continuous variables and categorical variables were presented as rates. We performed a bivariate analysis using Pearson's Chi²

Results: We included 243 patients 64% were in remission and 36% in low disease activity, 85% were woman, mean age was 60 years ± 10. Mean DAS28 was 2.53 ± 0.53. 81% of patients received conventional DMARDs and 19% received biological DMARDs. The most frequent finding was erosions 70% in hands and 7% in feet followed by synovitis in hands 58%. See table 1. We found disease activity in 60% of our patients were 51% had positive Doppler and synovitis, 1% had only positive Doppler and 8% patients only had synovitis. We did not find statistical association between disease activity according to ultrasound and age, sex and type of pharmacological therapy in patients classified as to be in remission or LDA.

Conclusions: The evidence found in this real-life setting data, showed that two thirds of RA patients classified according to DAS28 to be in remission or LDA have subclinical disease activity; thus the ultrasound is a very useful tool to evaluate patients with RA in clinical practice. Further research is needed in order to identify the reasons of disease activity in patients were clinical findings point towards remission or LDA.