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 ultrasonic 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.

Abstract AB0221 – Table 1

VARIABLE	PRESENT		ABSENT	
	n	%	n	%
HANDS				
SYNOVITIS	142	58	101	42
POWER	123	51	120	49
DOPPLER				
EROSIONS	170	70	73	30
OSTEOPHYTES	106	43	137	57
FEET				
SYNOVITIS	9	4	234	96
POWER	10	5	233	95
DOPPLER				
EROSIONS	16	7	227	93
OSTEOPHYTES	19	8	224	92

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AB0222

DIFFERENCES OF DISEASE IMPRESSION AND TREATMENT EXPECTATION IN RHEUMATOID ARTHRITIS PATIENTS WITH DIFFERENT DISEASE ACTIVITY

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Background: Rheumatoid arthritis (RA) is a systemic chronic arthritic inflammatory disease that affects daily life and work. Therefore, the treatment goals include subjective indicators such as activities of daily living disorder and fatigue as well as objective indicators such as disease activity (¹). In recent years, the progress of RA therapy has been remarkable, and many patients have achieved low disease activity (LDA) or remission; however, one-third of the patients still have a high disease activity. Is it right to adapt all patients to the same subjective evaluation goal?

Objectives: We conducted a questionnaire survey in RA patients to evaluate the following factors: 1) RA influence on emotions, 2) RA influence on daily life or work, 3) patient expectations from RA treatment and 5) a comparison of patients' individual assessment of each disease activity.

Methods: We included 289 patients with RA and divided them into two groups based on their disease activity: those achieving LDA or remission (R/L group: n=192) and those with moderate or high disease activity (M/H group: n=97). The mean ages of the R/L and M/H groups were 52.3 (18–81) and 56.7 (25–84) years, respectively. The mean disease duration of the R/L and M/H groups were 4.3 years (2 months – 25 years) and 5.6 years (2 months – 31 years), respectively. The survey comprised 19 questions, which had predefined answers about daily activities, relationship with family and friends, emotional wellbeing, expectation from RA treatment effect, and treatment goal-setting.

Results: For questions regarding daily activities and emotional wellbeing, there were more negative responses from the M/H group than from the R/L group. Daily activity which conclude housework and outdoor activities were more restricted in the M/H group than in the R/L group. Regarding emotional wellbeing, 63% patients in the M/H group and 32% in the R/L group felt that RA was depriving their happiness. Furthermore, 56% patients in the M/H group and 25% in the R/L group were worried about their independence in the future. Conversely, patients in the M/H group exchanged views about RA symptoms with family and friends more frequently than those in the R/L group; they were seeking psychological stabilisation. There were also differences in both the groups' expectation of the treatment effect. The most and the second expected treatment effects in both groups were pain improvement and in the early stage, respectively. The third most expected treatment effect was being able to do their work at home and outside in the R/L group and clinical symptoms improvement in the M/H group. Morning stiffness was more important than arthritis in the R/L group because a higher goal was set.

Although it would be desirable for medical professionals to set treatment goals for both groups, this tendency was higher in the M/H group.

Abstract AB0222 – Figure 1. Questionnaire results

Conclusions: The subjective goals in RA treatment vary depending on disease activity. High social goal-setting is important for patients whose disease activity is controlled. For patients with high disease activity, emotional support from their family and friends and setting goals regarding clinical symptoms by medical professionals are important.

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AB0223

HAS THE PRESENTATION AND SEVERITY OF RHEUMATOID ARTHRITIS CHANGED IN RECENT DECADES?

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Background: In recent decades, there have been social, economic and health changes, also in the treatment of rheumatoid arthritis (RA). The development and severity of RA can be affected by these changes. It is discussed if RA is currently less frequent and severe than before¹.

Objectives: To determine the changes in the clinical and demographic variables and the severity of RA that may have occurred over a period of four decades (from 1980 to 2015) and its repercussion in the response to methotrexate (MTX) monotherapy.

Methods: We conducted a retrospective study, reviewing the records of patients from a cohort of RA who received MTX monotherapy and compared the results of demographic and clinical variables by natural decades. The statistical analysis was performed using the Chi2 test and the one-way ANOVA test.

Results: We included 301 patients (202 women and 99 men) with a mean age at diagnosis of 49.6 (±13.2) years. The table 1 shows the characteristics of the complete sample and distributed by natural decades. The age at diagnosis was higher after 2000 (p<0.01), while the proportion of women, educational level, sedentary lifestyle, habits (tobacco, alcohol) and comorbidities did not change. There was also no variation in the joint pattern of presentation, percentage of RF/ACPA positive or mean value of RF and ACPA. There was a decrease in time from the onset of symptoms to diagnosis (from 21.7 to 15.3 months) (NS), but especially between the diagnosis and the first DMARD (from 34.5 to 1.4 months) and in the number of FAMES before MTX (p<0.01 for both), as well as in the baseline activity of the disease (PCR and DAS28-PCR), early erosions (<2 years) and extra-articular involvement (p<0.01). There were no changes in the dose of prednisone and MTX, nor in the route of administration, while folic acid supplements increased.