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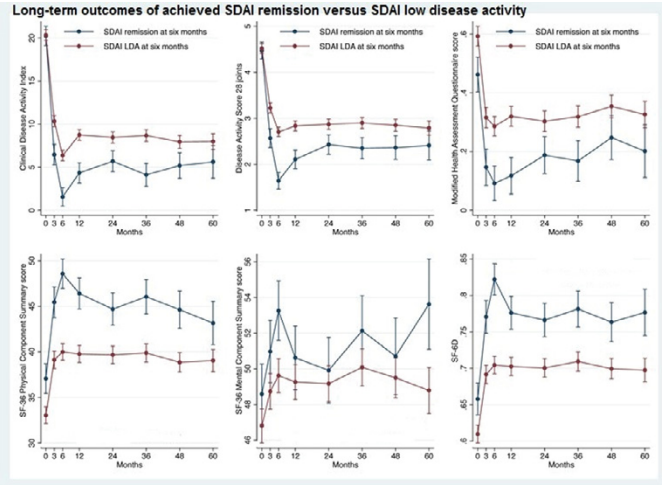
SAT0075 DOES EARLY REMISSION LEAD TO BETTER 5-YEAR OUTCOMES THAN LOW DISEASE ACTIVITY? RESULTS FROM THE REAL LIFE NOR-DMARD STUDY

V. Norvang, I.C. Olsen, E. Lie, E.K. Kristianslund, T.K. Kvien, E.A. Haavardsholm, T. Uhlig. *Department of Rheumatology, Diakonhjemmet Hospital, Oslo, Norway*

Background: When initiating therapy with synthetic disease-modifying anti-rheumatic drugs (sDMARDs) in patients with rheumatoid arthritis (RA), the recommended target is remission or low disease activity (LDA). Limited data exist on the impacts of reaching remission rather than LDA on long-term outcomes.
Objectives: To compare RA-patients who achieved Simplified Disease Activity Index (SDAI) remission versus LDA 6 months after initiating sDMARD therapy, with regard to physical function, Health Related Quality of Life (HRQoL) and disease activity during 5 years of follow-up in a routine clinical setting.
Methods: Data were provided NOR-DMARD, a prospective multicentre longitudinal observational study. We selected DMARD-naïve patients with RA enrolled between December 2000 and April 2009 who had a registered visit with available SDAI status 6 months after initiating sDMARD therapy. Data on each patient were collected at baseline, after 3, 6 and 12 months, and yearly thereafter, including the modified Health Assessment Questionnaire (MHAQ), the Medical Outcomes Study 36-item Short-Form Health Survey (SF-36) with Physical and Mental Components Summary scores (PCS and MCS, respectively) and SF-6D, and assessments that allowed the calculation of the composite disease activity scores SDAI, Clinical Disease Activity Index (CDAI) and the Disease Activity Score based on 28 joint counts (DAS28). Multivariate linear mixed models were used to explore the effect of SDAI status at 6 months on physical function (MHAQ), HRQoL (SF-36 PCS and MCS, SF-6D) and disease activity (SDAI, CDAI, DAS28) during 5 year follow-up. The statistical models were adjusted for age, gender, disease duration and baseline disease activity. Furthermore, we performed mixed model analyses separately for patients in LDA, MDA and HDA at baseline, exploring the impact of SDAI status at 6 months on long-term disease activity in each sub-group.
Results: Of 1148 eligible patients, 867 patients (75.5%) started with methotrexate in monotherapy and 281 (24.5%) started with another sDMARD or sDMARD combination. Patients in SDAI remission (n=145; 16.6%) rather than LDA (n=454; 39.5%) 6 months after initiating therapy had better physical function (MHAQ, estimated mean difference 0.11–0.20, $p<0.02$), higher SF-36 PCS (4.13–8.16, $p<0.003$) and SF-6D (0.06–0.12, $p<0.0001$), and lower disease activity (SDAI, 2.24–5.15, $p<0.05$) for all visits during 5 years of follow-up. Stratified mixed models analyses of patients in SDAI LDA, MDA and HDA at baseline, resulted in an overall significant long-term beneficial effect of achieving remission rather than LDA at 6 months; however, the differences were less distinct for patients who were already in a state of LDA at baseline.



Conclusions: The achievement of SDAI remission 6 months after initiating DMARD-therapy was associated with favourable long-term outcomes compared with the achievement of SDAI low disease activity. The results from the study support that stringent remission is the optimal treatment target in patients with RA.
Disclosure of Interest: V. Norvang: None declared, I. Olsen: None declared, E. Lie Consultant for: AbbVie, Celgene, Hospira, Pfizer, UCB, E. Kristianslund: None declared, T. Kvien Consultant for: AbbVie, Biogen, BMS, Boehringer, Ingelheim, Celltrion, Eli Lilly, Epirus, Janssen, Merck-Serono, MSD, Mundipharma, Novartis, Oktal, Orion Pharma, Hospira/Pfizer, Roche, Sandoz, UCB, E. Haavardsholm Grant/research support from: AbbVie, Pfizer, Roche, MSD, UCB, Consultant for: AbbVie, Pfizer, Roche, Eli Lilly, Celgene, UCB, T. Uhlig: None declared
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SAT0076 SERUM LEVEL OF SYNDECAN-4 AND ITS CORRELATION WITH CLINICAL PARAMETERS IN RHEUMATOID ARTHRITIS PATIENTS

X. Ye, J. Zhao, Z. Zhang. *Rheumatology and Clinical Immunology Department, Peking University First Hospital, Beijing, China*

Background: Heparan sulfate proteoglycan syndecan-4 plays an important role in inflammation. However, the role of syndecan-4 in rheumatoid arthritis (RA) has not yet been elucidated.
Objectives: To detect serum level of syndecan-4 in RA patients and investigate its correlation with RA clinical parameters.
Methods: The concentration of serum syndecan-4 was assayed by enzyme-linked immunosorbent assay (ELISA). 43 patients' serum samples from our RA cohort study between 2014 and 2016, and 20 age- and gender-matched osteoarthritis (OA) patients' serum samples were collected and analyzed. Compared the serum syndecan-4 levels in RA patients with DAS28$\geq$3.2 and DAS28$<$3.2 by Wilcoxon signed rank test. The relationships between serum syndecan-4 levels and RA clinical parameters (DAS28, rheumatoid factor (RF), erythrocyte sedimentation rate, C-reactive protein, etc.) were analyzed.
Results: Baseline serum syndecan-4 levels of RA patients were significantly higher than the matched OA patients (1101.56 pg/mL vs 281.41 pg/mL, $p<0.001$). In RA patients who had sera both at the point of DAS28$\geq$3.2 and DAS28$<$3.2 (n=13), we found that the former syndecan-4 levels were higher than the latter (1666.22 pg/mL vs 1378.34 pg/mL, p=0.65). The levels of serum syndecan-4 and RF were significantly and positively correlated in RA patients (r=0.696, p=0.008). Furthermore, there is a tendency that serum syndecan-4 levels were higher in the RF-positive (n=31) than in the RF-negative (n=12) RA patients (1344.43 pg/mL vs 971.27 pg/mL, p=0.078).

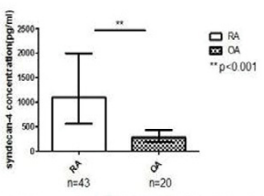

Figure 1. Serum syndecan-4 levels of RA patients and matched OA patients.

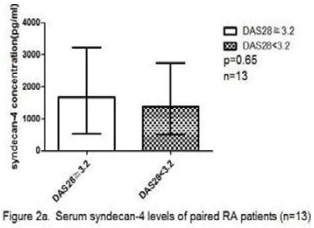

Figure 2a. Serum syndecan-4 levels of paired RA patients (n=13)

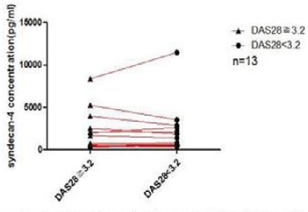

Figure 2b. Serum syndecan-4 levels of paired RA patients (n=13).

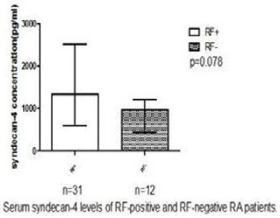

Figure 3. Serum syndecan-4 levels of RF-positive and RF-negative RA patients

Conclusions: Compared with age- and gender- matched OA patients, serum syndecan-4 concentration is significantly higher in RA patients. Serum syndecan-4 level is positively correlated with RF. Syndecan-4 may play an important role in thes pathogenesis of RA. Further investigation is required to study the mechanism of syndecan-4 in RA.
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Disclosure of Interest: None declared
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SAT0077 CLINICAL FEATURES AND PERFORIN A91V GENE ANALYSIS IN SO-JIA CHILDREN WITH MACROPHAGE ACTIVATION SYNDROME

X. Chen[1], H. Zeng[2]. *[1]Department of Pediatric Allergy, Immunology and Rheumatolog; [2]Department of Pediatric Allergy, Immunology and Rheumatology, Guangzhou Women and Children's Medical Center, Guangzhou, China*

Objectives: Macrophage activation syndrome (MAS) is a severe, potentially life-threatening syndrome.Here we aim to review the precipitating events,clinical features, treatment, outcome and perforin A91V gene analysis in systemic onset juvenile idiopathic arthritis (SoJIA) children with MAS.