

Conclusions: Our results demonstrate that 12/15-LOX plays a regulatory role during inflammatory immune response by counteracting the NLRP3 inflammasome activity through down-regulation of caspase-11 and 5-LOX activity. Thus, we identified a novel negative regulatory pathway of inflammasome activity.

References:

- [1] Barczyk, K. et al. Glucocorticoids promote survival of anti-inflammatory macrophages via stimulation of adenosine receptor A3. *Cancer* 116, 1–3 (2010).
- [2] Conrad, D.J. The arachidonate 12/15 lipoxygenases. A review of tissue expression and biologic function. *Clinical reviews in allergy&immunology* 17, 71–89 (1999).

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.4897

THURSDAY, 15 JUNE 2017

Rheumatoid arthritis - prognosis, predictors and outcome

THU0068 THE RISK OF INDIVIDUAL AUTOANTIBODIES, AUTOANTIBODY COMBINATIONS AND AUTOANTIBODY LEVELS FOR ARTHRITIS DEVELOPMENT IN CLINICALLY SUSPECT ARTHRALGIA

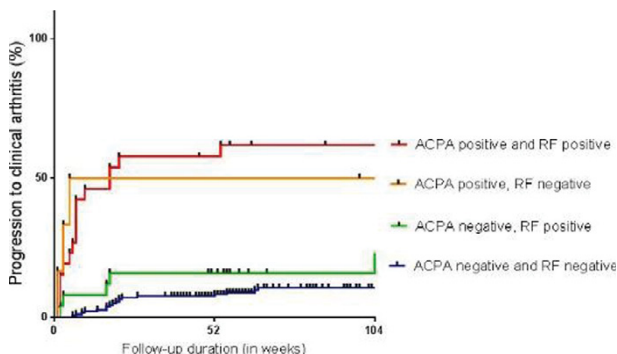
R.M. Ten Brinck, H.W. van Steenberg, M.A. van Delft, M.K. Verheul, R.E. Toes, L.A. Trouw, A.H. van der Helm-van Mil. *Rheumatology, Leiden University Medical Centre, Leiden, Netherlands*

Background: Autoantibody testing is helpful to predict progression to arthritis in subjects at risk. Previous longitudinal studies mainly focussed on autoantibody-positive arthralgia patients. Consequently predictive values of autoantibodies were evaluated relative to each other. This study assessed risks of having anticitrullinated protein antibodies (ACPA), rheumatoid factor (RF) and/or anti-carbamylated protein antibodies (anti-CarP) for arthritis development in arthralgia patients considered at risk for RA by rheumatologists based on clinical characteristics (Clinically Suspect Arthralgia, CSA).

Objectives: To assess risks of having anticitrullinated protein antibodies (ACPA), rheumatoid factor (RF) and/or anti-carbamylated protein antibodies (anti-CarP) for arthritis development in arthralgia patients considered at risk for RA by rheumatologists based on clinical characteristics (CSA).

Methods: Baseline ACPA, RF and anti-CarP antibodies of 241 patients, consecutively included in the CSA-cohort, were studied in relation to development of clinical arthritis during a median follow-up of 103 (IQR 81–114) weeks.

Results: ACPA, RF and anti-CarP antibodies were all univariably associated with arthritis development, hazard ratios (95% CI) were 8.5 (4.7–15.5), 5.1 (2.8–9.3) and 3.9 (1.9–7.7). Only ACPA, and not RF or anti-CarP, was independently associated (HR 5.1, 2.0–13.2). Relative to autoantibody-negative CSA-patients, ACPA-negative/RF-positive patients had HRs of 2.6 (1.04–6.6), ACPA-positive/RF-negative patients 8.0 (2.4–27.4), and ACPA-positive/RF-positive patients 10.5 (5.4–20.6, Figure). PPVs for development of clinical arthritis within two years were: 38% for ACPA-negative/RF-positive, 50% for ACPA-positive/RF-negative, and 67% for ACPA-positive/RF-positive patients. Higher ACPA-levels were not significantly associated with increased progression to clinical arthritis, in contrast to higher RF-levels. Autoantibody levels were stable during follow-up.



Conclusions: ACPA conferred the highest risk for arthritis development and had an additive value to RF. However, >30% of ACPA-positive/RF-positive CSA-patients did not develop arthritis during two-year follow-up. Thus CSA and information on autoantibodies is insufficient to accurately identify imminent autoantibody-positive RA.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.4721

THU0069 HOW MANY RHEUMATOID ARTHRITIS PATIENTS IN REMISSION EXPERIENCE PAIN? WHAT TYPES AND WITH WHAT FREQUENCY WERE PAINKILLERS RECEIVED? IS REACHING REMISSION A REALISTIC GOAL?

E. Torikaj, M. Suzuki, Y. Matsuyama. *Orthopaedic Surgery, Hamamatsu University School of Medicine, Hamamatsu, Japan*

Background: The primary treatment goal in rheumatoid arthritis (RA) patients is to reach remission. Earlier diagnosis, advancements in disease-modifying antirheumatic drugs, and improved treatment strategies have enabled increasing numbers of RA patients to achieve remission. However, the definition of remission involves the fulfillment of specific criteria, which include a number of swollen and tender joints, the erythrocyte sedimentation rate (ESR), and the visual analog scale of pain (VAS pain). Some patients with RA in remission wished to take painkillers because they experienced pain and physical limitations in their daily life or at work. Is reaching remission a realistic goal?

Objectives: To evaluate VAS pain and patient's global assessment (PGA) in those with RA in remission, and to determine the types and frequency of which painkillers were received.

Methods: In a study of 554 RA patients with a definite RA diagnosis according to 1987 ACR criteria, we enrolled 235 patients (82% females). All patients had DAS28-ESR <2.6, defined as clinical remission, and had no acute pain as a result of operation or trauma. The mean age and disease activity were 53.6 years and 2.67, respectively. Seventy-one percent of patients were treated with MTX, 30.2% with glucocorticoids, and 38.4% with a biological agent. We evaluated VAS pain and PGA and investigated why patients experienced dissatisfaction with VAS pain and PGA. Moreover, we elucidated how many patients used painkillers and what types of painkillers were used.

Results: The mean values of clinical and laboratory data were described as follows: 28 swollen joints, 0.69; 28 tender joints, 1.56; RF, 157 IU/mL; C-reactive protein, 0.14 mg/dL; ESR, 19 mm/h; and health assessment questionnaire disability index score, 0.618. Steinblocker stages (I/II/III/IV) were (166/51/18/0), respectively and Steinblocker classes (I/II/III/IV) were (155/68/12/0), respectively. The mean VAS pain was 1.81. Thirty-five (14.9%) of 235 patients had VAS pain >3 (Fig. 1). The mean PGA was 1.54. Seventeen patients (7.2%) reported PGA >3 (Fig. 2). Reasons for VAS pain or PGA of >3 were musculoskeletal pain (48.6%), neuropathic pain (23.1%), psychological reasons (9.3%), and other (19%). Thirty-one patients (13.2%) were treated with painkillers such as NSAIDs (46.2%), acetaminophen (22.5%), pregabalin (18.6%), tramadol (4.1%), and other (8.6%). The mean values for VAS pain and PGA were improved after using painkillers by 0.73 and 0.36, respectively. There was a significant difference in the improvement rate of VAS pain and PGA between pre-use and post-use of pain-killer (Fig. 3).

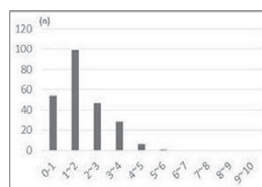


Fig.1 VAS pain

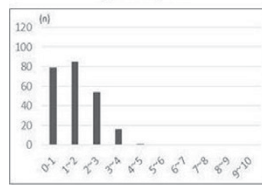


Fig.2 PGA

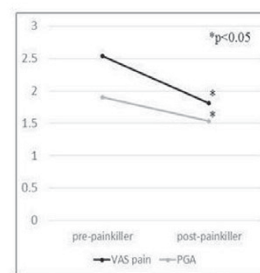


Fig.3 change of VAS pain and PGA

Conclusions: VAS pain and PGA are important for understanding the patients' functional disabilities and problems. We should attend to patients' demands and make an informed decision to form a realistic goal for RA treatment. Given that VAS pain and PGA were improved because of the use of painkillers in the current study, we suggest that the ability to appropriately prescribe painkillers is an important method with which to satisfy RA patients in remission.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.1760

THU0070 TREAT-TO-TARGET IN RA: WHAT LEVEL OF TREATMENT RESPONSE IS NECESSARY BY 3 MONTHS IN ORDER TO ACHIEVE THE TREATMENT TARGET BY 6 MONTHS? RESULTS FROM A REAL LIFE STUDY

V. Norvang¹, I.C. Olsen¹, E.K. Kristianslund¹, T. Uhlig¹, T.K. Kvien¹, D. Aletaha², J. Smolen², E.A. Haavardsholm¹. ¹Rheumatology, Diakonhjemmet Hospital, Oslo, Norway; ²Division of Rheumatology, Department of Internal Medicine 3, Medical University of Vienna, Vienna, Austria

Background: When initiating therapy with disease-modifying anti-rheumatic drugs