statistically significant difference was found for the rest of parameters of lipids or inflammation markers.

Conclusion: IMT measurement confirmed that patients with RA are at a higher risk of developing early atherosclerosis. The results of this study demonstrate an improvement of cardiovascular risk in RA patients treated with biological DMARDs via an increase in HDL-c and ApoA1 levels and a reduction of ESR and blood pressure measurements even from the first 3 months of treatment initiation. Long term studies are needed to determine the impact of biological agents on cardiovascular risk in RA.

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None declared

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THU0133 TENDERNESS CAN BE REGARDED AS A SIGN OF INFLAMMATION IN RHEUMATOID ARTHRITIS

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Background: In inflammatory joint diseases, joint swelling is regarded as a sign of inflammation, which is associated with structural progression [1-3]. However, the significance of tenderness without swelling is unclear.

Objectives: To determine whether clinical tenderness can be considered a sign of inflammatory joint activity in patients with rheumatoid arthritis (RA), osteoarthritis (OA), or psoriatic arthritis (PsA)

Methods: 36/24/30 patients respectively with RA, OA and PsA were included in the study. Each patient underwent clinical examination, followed by an ultrasound examination of bilateral MCP 1-5 (metacarpophalangeal), PIP 1-5 (proximal interphalangeal) joint and wrists; the sonographer was blinded to clinical data. On clinical examination synovial swelling and tenderness were evaluated using a binary scoring method, and tender, non-swollen joints (TNS) were identified. Grey-scale signs of synovitis (GS) and Power Doppler signal (PD) were evaluated using a semiquantitative grading system.

Differences of PD signals between groups (RA vs. OA, RA vs. PsA, TNS vs. non-tender non-swollen joints) were calculated by Chi-Square test. Furthermore, joints of RA and PsA patients were tracked back for up to 6 years to identify the time point of the last swelling of that respective joint. Kaplan-Meier estimates for the occurrence of the last time point of swelling were compared between PD positive and PD negative TNS joints.

Results: TNS joints more often showed PD signal in RA patients as compared to those with OA and PsA (18.7% vs. 11.5% vs. 9.2%, respectively, $p=0.135$ for RA vs. OA; $p<0.01$ for RA vs. PsA). TNS joints were significantly more often PD positive as compared to non-tender non-swollen joints (18.7% vs. 10.3% respectively, $p<0.01$) in RA, but not in PsA (9.2% vs. 7.6%, $p=0.54$) or OA (11.5% vs. 10.2%, $p=0.72$) (fig. 1). Kaplan-Meier analysis revealed a significantly shorter time period to last observed swelling in PD positive as opposed to PD negative TNS joints in both RA (45.2 vs. 65.5 months, $p=0.017$) and PsA (20.6 months vs. 107.7 months, $p<0.001$), however we found no difference in GS positive vs. negative TNS joints.

Conclusion: The results of this study confirm the current practice of considering tenderness a sign of active inflammation in RA, but imply that this may not be the case in PsA or OA. The fact that shorter time to last swelling was associated with positive PD in TNS joints suggests that, at least in RA, tenderness might reside after prior clinical swelling has resolved.

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Abstract THU0133 – Figure 1. Power Doppler signals of tender non-swollen joints compared to non-tender non-swollen joints in rheumatoid arthritis (RA), psoriatic arthritis (PsA) and osteoarthritis (OA).

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THU0134 COMORBIDITIES IN >5000 PATIENTS WITH RHEUMATOID ARTHRITIS INITIATING TREATMENT WITH METHOTREXATE IN ROUTINE CARE: PREVALENCE AND IMPACT ON TREATMENT OUTCOMES. AN OBSERVATIONAL COHORT STUDY FROM DANBIO

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Background: Methotrexate remains the anchoring drug for the treatment of rheumatoid arthritis (RA). Patients with RA often have comorbidities e. g. diabetes or pulmonary disease. Although methotrexate has been used for decades, little is known about the impact of various comorbidities on treatment outcomes.

Objectives: To describe the prevalence of comorbidities in csDMARD naïve RA patients initiating treatment with methotrexate in routine care and to explore the impact of common comorbidities on methotrexate treatment outcomes (achieving remission and adherence to treatment).

Methods: Observational cohort study based on the Danish nationwide quality registry, DANBIO. Adult RA patients who started treatment with methotrexate (oral or injection) as first csDMARD year 2010-2017 and who had been followed since onset of disease with regular controls were included. Concomitant treatment with other DMARDs were allowed. Treatment outcomes after ~ 6 months of treatment were identified in DANBIO. Data were censored by April 2018. Seven different comorbidities (Figure) prior to start of methotrexate were identified in the national patient registry (NPR) through linkage by social security numbers.

Impact of each comorbidity was explored as 1) overall methotrexate treatment retention rate and 2) DAS28 remission rate (after 6 months' treatment). Analyses were by Cox- and logistic-regression analyses (adjusted for gender and age). The comorbidities were included one by one in the models. Finally, similar analyses were performed summed for all the seven comorbidities as any comorbidity yes/no.

Results: 5828 patients were included (66% female, median age 61 (IQR 51-70) years), whereof 906 (15.5%) had ≥1 of the predefined