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]. 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.

Results: 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.

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.

REFERENCES:

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. The 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 comorbidity.
Abstract THU0134 – Figure 1

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THU0135

DETERMINANTS OF DISCORDANCE IN PATIENT’S AND PHYSICIAN’S GLOBAL ASSESSMENTS OF DISEASE ACTIVITY OF RHEUMATOID ARTHRITIS IN THE “REAL” STUDY – BRAZIL

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Background: Discordance between the patient’s global assessment of dis-
ease activity (PGA) and examiner’s global assessment of PGA has been described in rheumatoid arthritis (RA) (1,2). Understanding the reasons for this discrepancy is essential in the context of treat-to-target treatment strategy.

Objectives: To assess the determinants of PGA and EGA and factors associated with discordance between them.

Methods: The REAL study included RA patients from Brazilian public health centers. Clinical, laboratory and outcomes measures were collected. PGA and EGA were rated on a visual analog scale and analyzed. Three groups were defined: no discordance (a difference between PGA and EGA within 3 cm), positive discordance (PGA exceeding EGA by >3 cm), and negative discordance (PGA less than EGA by >3 cm).

Multivariate regression analysis was used to identify determinants of PGA and EGA and their discordance.

Results: Among the 1,115 RA patients (female, mean age 56.7y and median dis-
ease duration of 12.7y) were enrolled. Two factors were associated with PGA in the final multivariate model: one point increase in the pain scale (PS) leads to an increase of 0.62 in PGA; one point increase in HAQ increases by 9,25 points the PGA. The factors associated with EGA were: PS, number of tender and swollen joints (NTJ and NSJ), RF, ESR, and use of corticosteroids. Discordance between patient and physician was found in 30.52%: positive discordance (PD) in 24.6% and negative discordance (ND) in 5.92%. An increase of one point in the NSJ was associated with a 12% increase in the chance of ND. The chance of PD increased by 90% and 2% for each unit increased in HAQ and PS respectively. Finally, the chance of PD decreased by 3% for each point increased in NTJ and by 15% for each point increased in NSJ.

Conclusion: In one-third of the assessments, there was disagreement between PGA and EGA (a PD in 80% of them). Pain and function were discriminators for patients to estimate disease activity, while swollen joints were the main factor related to a worse examiner’s evaluation. These data show how different can be the perspectives of patients and assistants.

References:
[1] Smolen JS, Strand V, Koenig AS, Szumski A, Kotak S, Jones TV. Discord-

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