RTX-treated patients could not be established given the low number of patients consenting to 3 longitudinal biopsies it is conceivable that RTX is responsible for preserving exocrine function.

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Spondyloarthritis - treatment

OP0137

TUMOR NECROSIS FACTOR INHIBITORS SHOW A DELAYED EFFECT ON RADIOGRAPHIC SACROILIITIS PROGRESSION IN PATIENTS WITH EARLY AXIAL SPONDYLOARTHRITIS: 10-YEAR RESULTS FROM THE GERMAN SPONDYLOARTHRITIS INCEPTION COHORT

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Background: Observational cohort studies have shown that there is low, but still detectable progression level in radiographic sacroiliitis, which might also have an impact on the function in patients with axial spondyloarthritis (axSpA). Recent data showed that tumor necrosis factor inhibitors (TNFi) might retard spinal progression when initiated earlier and taken longer in patients with axSpA. However, the question of whether they also have such an effect on radiographic progression in sacroiliac joints (SIJs) is still unclear.

Objectives: To investigate the longitudinal association between radiographic sacroiliitis progression and treatment with TNFi in patients with early axial SpA in a long-term inception cohort.

Methods: Based on the availability of at least two sets of SIJ radiographs, 301 patients (166 with nr-axSpA, symptom duration ≤ 5 years and 135 with r-axSpA, symptom duration ≤ 10 years) from the German Spondyloarthritis Inception Cohort (GESPIC) were included in this analysis. These patients contributed with a total of 737 2-year radiographic intervals. Two trained and calibrated central readers scored the radiographs according to the modified New York criteria. If both scored an image as definite radiographic sacroiliitis, the patient was classified as having r-axSpA. The sacroiliac sum score was calculated as a mean of both readers. The association between previous as well as current TNFi use and radiographic sacroiliitis progression, which was defined as the change in the sacroiliitis sum score over 2 years, was analysed using longitudinal generalized estimating equations (GEE) analysis.

Results: At baseline, 9 (3.0%) patients were treated with a TNFi, and 87 (28.9%) patients received at least one TNFi during the entire follow-up period. A total of 141 of the radiographic intervals were covered with TNFi of any duration, while 109 of them were covered with a TNFi of at least 12 months. While receiving ≥ 12 months TNFi in the previous interval was associated with a lower progression of the sacroiliitis sum score compared to not receiving TNFi in the previous interval, this was not the case in patients who received TNFi ≥ 12 months in the current 2-year interval (Figure 1). The significant association between TNF ≥ 12 months in the previous interval and progression in the sacroiliitis sum score were confirmed in the adjusted multivariable longitudinal GEE analysis. In addition, a similar trend for the beneficial effects was observed in different models, which included other treatment definitions with TNFi in the previous 2-year interval (Table).

Conclusion: Treatment with TNFi was associated with retardation of radiographic sacroiliitis progression in patients with axSpA. This effect becomes evident between 2 and 4 years after treatment initiation.

Figure. A) Cumulative probability plot of the 2-year progression in the sacroiliitis sum score, stratified by receiving at least 12 months TNFi in the previous and current 2-year radiographic intervals. **B)** The change in sacroiliitis sum scores over two years in patients with axial spondyloarthritis treated vs non-treated with TNFi at least 12 months in the previous and current 2-year radiographic intervals.

Table 1. The longitudinal GEE analysis of the association between progression in the sacroiliitis sum score and TNFi use.

TNFi treatment definition	Reference	β^* (95% CI)
TNFi for ≥ 12 months in the previous 2-year interval	No TNFi for ≥ 12 months in the previous 2-year interval	-0.09 (-0.18, -0.003)
Any TNFi use in the previous 2-year interval	No TNFi use in the previous 2-year interval	-0.09 (-0.17, 0.002)
TNFi for ≥ 12 months in the current 2-year interval	No TNFi for ≥ 12 months in the current 2-year interval	-0.03 (-0.11, 0.06)
Any TNFi use in the current 2-year interval	No TNFi use in the current 2-year interval	0.05 (-0.05, 0.14)
TNFi for ≥ 12 months in the previous and ≥ 12 months in the current 2-year interval	No TNFi for ≥ 12 months in the previous and ≥ 12 months in the current 2-year interval	-0.08 (-0.17, 0.004)

* Parameter estimates from the multivariable models adjusted for sex, age at the beginning of the current 2-year interval, HLA-B27 positivity, symptom duration at the beginning of the current 2-year interval, time-averaged elevated CRP, time-averaged BASDAI, and time-averaged NSAID intake score in the current 2-year interval.

References:

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OP0138

FEASIBILITY OF PROGRESSIVE ANTI-TNF TAPERING IN AXIAL SPONDYLOARTHRITIS PATIENTS IN LOW DISEASE ACTIVITY: RESULTS FROM THE MULTICENTER NON-INFERIORITY PROSPECTIVE RANDOMIZED CONTROLLED TRIAL SPACING

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