interruption. Further, continuation of the same anti-TNF α did not cause relapse in some cases.

The underlying SpA was well controlled (ASDAS-CRP) when uveitis, patients being classified as responders compared to previous visit, suggesting paradoxical uveitis.

Conclusions: Although rare, new onset or flare of uveitis may occur during anti-TNF therapy in axSpA. Surprisingly, not only TNF receptor but also monoclonal antibodies were responsible, etanercept being involved mainly in new onset uveitis.

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SAT0277 IMMUNOGENICITY AND LOSS OF RESPONSE TO TNF INHIBITORS IN AXIAL SPONDYLOARTHRITIS: RESULTS FROM AN OBSERVATIONAL COHORT STUDY

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Objectives: We aimed to evaluate the immunogenicity of TNF- α inhibitors and to assess potential influence on serum drug levels and clinical efficacy in patients with axial spondyloarthritis (axSpA).

Methods: We performed a cross sectional observational cohort study in 87 consecutive axSpA receiving anti-TNFs (either for the first time or switched), followed-up in a single outpatient rheumatology department. Treatment with anti-TNF agents was recommended in accordance with the local regulations on the initiation and continuation of biologics, as well as ASAS/EULAR guidelines. Disease activity scores were assessed at baseline (V1) and study visit (V2), while drug trough levels and anti-drug antibodies were measured in serum samples (ELISA, Progenika) and collected before the next administration as a single-point data. Serum drug levels were considered positive if >0.035 μ g/mL IFX, >0.024 μ g/mL ADL and >0.035 μ g/mL ETN, while the cut-offs for anti-IFX was 5AU/mL, anti-ADL 10AU/mL, anti-ETN 142 AU/mL. Statistical analysis was performed using SPSS version 19.0, p<0.05.

Results: Among 150 axSpA treated with TNF inhibitors in our centre, 28 (32.18%) receiving adalimumab (ADL), 19 (21.83%) infliximab (IFX) and 40 (45.97%) etanercept (ETN) were included in the immunogenicity analysis. Only 11 patients (12.64%) developed anti-drug antibodies, 8 under ADL (28.57%) and 3 under IFX (15.78%), with significant decrease in drug levels (3.97 μ g/mL vs. 0.07 μ g/mL ADL, p<0.05; 1.82 μ g/mL vs. 0.05 μ g/mL IFX, p<0.05) and impact on disease outcomes (p<0.05).

Higher disease activity scores (BASDAI, ASDAS-CRP) were reported in anti-drug positive axSpA irrespective of the background therapy (p<0.05), with more patients classified as being in a high or very high disease activity status at V2. Furthermore, a relation between clinical improvement (change in ASDAS) and immunogenicity was reported: positive anti-drug antibodies axSpA achieved worse clinical response than negative anti-drug antibodies cases, with a significant association between ADL respectively IFX levels and ASDAS (p<0.05). No anti-drug antibodies were found in patients treated with ETN; significant higher persistence on ETA than under monoclonal antibodies was registered in our axSpA (p<0.05).

Conclusions: Immunogenicity may impact disease outcomes and drug survival, particularly in the adalimumab and infliximab treated axSpA. Measuring anti-drug antibodies and serum drug levels may help to optimise therapeutic strategies in selected patients.

Disclosure of Interest: None declared

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SAT0278 NSAIDS REDUCES RADIOGRAPHIC PROGRESSION IN SACROILIAC JOINTS IN EARLY AXIAL SPONDYLOARTHRITIS

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Background: According to the ASAS-EULAR management recommendations for axial spondyloarthritis (axSpA) patients (pts) suffering from pain and stiffness should use an NSAIDs as first-line drug and for pts who respond well to NSAIDs continuous use is preferred if symptomatic otherwise. Two studies have suggested that the continuous use of NSAIDs in patients with an elevated CRP results in reduced progression of structural damage in the spine in comparison to on-demand use.^{1, 2} But up-to-date the question of the effect of NSAIDs on radiographic progression in early axSpA remains open.

Objectives: To compare continuous and on-demand treatment groups on radiographic progression sacroiliac joints (SIJ) in axSpA.

Methods: The research included 68 pts with early axSpA^{ASAS criteria, 2009} from Moscow CORSAR cohort with disease duration <5 years, age onset <45 years and at least 2 years follow up (FUP). 33 (48.5%) males, pts mean age was 28,5 (5,8) y., average disease duration – 24,1 (15,4) mo, 63 (92,6%) pts were HLA-B27 positive. Pts were randomised into two treatment groups: group 1 – continuous uses of NSAIDs; group 2 – on-demand uses of NSAIDs. The dosages of NSAIDs accounted by the ASAS NSAID index. At baseline 6 pts received TNF inhibitors, after 2 y. FUP 14 pts receives TNF inhibitors.

Results: No significantly differences in axSpA disease activity between two groups at baseline (table 1) and after 2 y. FUP (table 2). At group №1 8,2% pts has radiographic progression in SIJ (from nr-axSpA to AS), at group №2%–13,3% pts (p=0,000).

Abstract SAT0278 – Table 1. Outcome parameters at baseline.

	Group №1 (n=31)	Group №2 (n=31)	p
Ankylosing spondylitis, n,%	22 (70,9%)	15 (50,0%)	0088
Non-radiographic axSpA, n,%	9 (29,1%)	17 (50,0%)	0257
ASDAS CRP, Me, [25%; 75%]	2,5 ^{1,5} ; 3,5	2,3 ^{1,2} ; 2,7	0300
BASDAI, Me, [25%; 75%]	4,0 ^{2,4} ; 5,1	2,8 ^{1,5} ; 4,4	0299
CRP, Me, [25%; 75%]	5,1 ^{1,7} ; 20,0	4,5 ^{1,0} ; 12,8	0648
BASFI, Me, [25%; 75%]	1,4 [0,5; 2,5]	0,5 [0,2; 1,7]	0152
Positive MRI of the SIJs, n,%	22 (70,9%)	15 (50,0%)	0088
LEEDS score, Me, [25%; 75%]	1,0 [0; 3,0]	0,5 [0; 2,0]	0217

Abstract SAT0278 – Table 2. Outcome parameters after 2 years of NSAIDs treatment.

	Group №1 (n=24)	Group №2 (n=30)	p
Ankylosing spondylitis, n,%	19 (79,1%)	19 (63,3%)	0201
Non-radiographic axSpA, n,%	5 (20,9%)	11 (36,7)	0229
ASDAS CRP, Me, [25%; 75%]	1,2 [0,9; 2,4]	1,3 [0,7; 2,1]	0754
BASDAI, Me, [25%; 75%]	2,1 ^{1,0} ; 3,0	1,8 [0,9; 2,4]	0553
CRP, Me, [25%; 75%]	1,9 [0,85; 11,3]	1,3 [0,6; 5,0]	0292
BASFI, Me, [25%; 75%]	0,4 [0,1; 2,1]	0,1 [0; 0,4]	0,0097
Positive MRI of the SIJs, n,%	8 (33,3%)	8 (26,6%)	0573
LEEDS score, Me, [25%; 75%]	0 [0; 1,0]	0 [0; 2,0]	0571
NSAID index, Me, [25%; 75%]	100 ^{58,5} ; 100	28,5 ^{10,7} ; 75,0	0,0012

Conclusions: The frequency of NSAIDs treatment does not affect on the activity of axSpA. Continuous uses of NSAIDs reduces radiographic progression in sacroiliac joints in pts with early axSpA.

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SAT0279 COMPARISON OF RETENTION RATES BETWEEN TUMOUR NECROSIS FACTOR- α INHIBITORS IN ANKYLOSING SPONDYLITIS PATIENTS: DATA FROM THE KOREAN COLLEGE OF RHEUMATOLOGY BIOLOGICS REGISTRY

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Background: Drug persistence of tumour necrosis factor- α inhibitors (TNFi) tends to be higher in patients with ankylosing spondylitis (AS) than rheumatoid arthritis but there are few studies of Asian AS patients in the literature.

Objectives: To investigate drug retention rates of various TNFi used in Korean AS patients.