Federation; ⁷RSMU named after N.I.Pirogov, Department of General Medicine, Moscow, Russian Federation; ⁸Russian Medical Academy of Continuing Professional Education, Rheumatology, Moscow, Russian Federation; ⁹CJSC «European Medical Center», Rheumatology, Moscow, Russian Federation

Background: The number of new biologics in treatment of axial spondyloarthritis (axSpA) is rapidly increasing. It is important to assess timely their place in the treatment of axSpA, especially with regard to retention on therapy.

Objectives: To compare retention on therapy with different biologics in patients with axSpA.

Methods: We retrospectively analyzed the data of axSpA patients receiving biologics from the MUAR register. Predictors of retention on therapy were selected by forward stepwise variable selection within Cox regression proportional hazard model. These predictors were considered as confounders when comparing the risks of biologics withdrawal.

Results: 990 treatment episodes in 640 patients with axSpA were analyzed (non-radiographic axSpA – 4.1%, ankylosing spondylitis – 95.9%). The duration of episodes was 824±920 days. Men were 66.6%, mean age 46.4±11.4. The patients were treated with Adalimumab (ADA) (n= 252 treatment episodes), Golimumab (GOL) (n=82), Infliximab (INF) (n=167), Netakimab (NET) (n=9), Secukinumab (SEC) (n=75), Certolizumab pegol (CER) (n=66), Etanercept (ETA) (n=339).

The following predictors of withdrawal risk were identified –

1. The total duration of the disease
2. The duration of the disease before the onset of biologic treatment
3. Gender
4. Family history of non-inflammatory spondylopathy (degenerative spinal disease)
5. The line of biologic treatment
6. The level of education

The severity of radiographic sacroiliitis and HLA B-27 positivity were not associated with the risk of discontinuation of biologics.

The identified predictors were further considered as confounders. Adjusted for confounders, ETA had the lowest treatment withdrawal risk (Figure 1). ADA, GOL, INF, SEC, CER had significantly higher risk of withdrawal compared with ETA (Table 1).

Conclusion: Our analysis detected predictors associated with risk of biologics withdrawal in axSpA patients in real clinical practice. There are significant differences between biologics regarding retention on treatment.

Table 1. Hazard ratio for treatment withdrawal

Drug	Hazard ratio (Exp B)	p
ADA	1.52 [*]	0.004
GOL	2.95 [*]	0.000
INF	2.574 [*]	0.000
NET	3.680 [*]	0.073
SEC	2.133 [*]	0.005
CER	2.922 [*]	0.000

^{*} - withdrawal risk relative to ETA

Figure 1. Picture 1. Treatment withdrawal risk

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.3642

POS0938

A NEW APPROACH FOR ULTRASOUND GUIDED SACROILIAC JOINT INJECTIONS IN SPONDYLOARTHRITIS

P. Todorov¹, A. Batalov¹. ¹Medical University of Plovdiv, Rheumatology and Internal Diseases Propaedeutics, Plovdiv, Bulgaria

Background: Sacroiliac joints (SIJ) inflammation and pain is particularly common in patients with Spondyloarthritis (SpA). SIJs injections represent a valuable therapeutic option in this condition. Traditionally this procedure (irrespective of the guidance method) aims at the lower (synovial) part of the joint. However, there is growing body of evidence that enthesitis rather than synovitis is the cardinal pathological lesion in SpA. Thus, an approach targeting the more superior (ligamentous) part of the joint, with the numerous entheses of the intraspinous sacroiliac ligaments placed there, could be more beneficial in SpA patients with active sacroiliitis. The Posterior sacroiliac ligament (PSIL) is the most superficial of the SIJ ligaments, covering the other dorsally. Thus, using PSIL as a landmark and placing the needle tip beneath it, the injected solution will inevitably spread in the ligamentous portion of the joint.

Objectives: To assess the feasibility and efficacy of a new technical approach of ultrasound (US) guided SIJ injections in SpA targeting the ligamentous part of the joint.

Methods: The feasibility and efficacy of our approach was tested on 22 consecutive SpA patients, after an inform consent, with pain in the SIJ that did not respond to NSAIDs and who were otherwise on a stable medical treatment. A solution consisting of 7 mg Betamethasone (1ml) and 1% Lidocaine (1.5 ml) was administered to all injected SIJs. The efficacy of the procedure was assessed by patients reported outcome measures: mean reported pain level (on VAS), level of disability due to the back pain (Roland Morris Disability Questionnaire – RMDQ) and quality of the night sleep (Jenkins Sleep Evaluation Questionnaire – JSEQ). They were filled by the patients at baseline and two months after the intervention. Methodology of the procedure: All injections were done with patients in a prone position using an Esaote My Lab 7 machine and a linear transducer (3-12 MHz). After visualization of the SIJ cleft, the probe was slide caudally to the level of the second sacral foramen. Then the probe was rotated to a slightly oblique position with its lateral part higher and the medial part lower. In this way the probe became parallel to the PSIL, and latter is visualized sufficiently well in its long axis. Then, in this position, a 22G, 9mm spinal needle (Spinocan) was inserted at the medial side of the probe following an in-plane free-hand technique and advanced in cranio-lateral direction. When the needle tip was seen to penetrate the PSIL, and thus enter the SIJ ligamentous part, 0.2ml of the solution was injected to confirm that it spreads beneath the PSIL, rather than above or in this ligament. After that, a Color Doppler (CD) box was activated and placed over the SIJ to monitor the spread of the injected solution and ensure that it keeps below the PSIL. The whole solution was injected under this direct US and CD visualization and the needle tip was repositioned again beneath the PSIL if needed during the procedure.

Feasibility of this injection approach was assessed on the basis of the encountered difficulties in adequate visualization of the PSIL and the injected solution flow beneath it from the start until the end of the intervention.

Results: The results of the procedure, assessed in two months showed that the mean pain score decreased by 68% (VAS from 7.22±1.23 to 2.28±2.37), the disability score - by 46% (RMDQ from 11.86±5.12 to 6.42±6.39), and the sleep quality improved by 41% (JSEQ from 9.86±4.76 to 5.84±3.43). The procedure was found completely feasible by the performing operator and the visualization of the landmark (PSIL) was adequate in all patients and throughout the whole procedure. The CD allowed to confirm reliably that the solution is injected under the PSIL at any time point.

Conclusion: The SIJ injections performed by our approach and targeting the ligamentous part of the joint, proved to be completely feasible and furthermore – efficient, in alleviating the symptoms of active sacroiliitis in SpA patients.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.3820

POS0939

WHEN DO THE ACTIVE SACROILIITIS MRI FINDINGS LOSS IN ANKYLOSING SPONDYLITIS? A RETROSPECTIVE, CROSS-SECTIONAL, OBSERVATIONAL STUDY

A. C. Genç¹, F. Turkoglu Genç², Z. Öztürk³, D. Karatas³, S. M. Turk³, E. Gönüllü³. ¹Geyve Government Hospital, Internal Medicine, Sakarya, Turkey; ²Sakarya University, Internal Medicine, Sakarya, Turkey; ³Sakarya University, Rheumatology, Sakarya, Turkey