and the contradictory messages among professionals. Therefore we decided to develop an electronic tool to facilitate and encourage the prescription of exercise.

Objectives: To evaluate the usefulness of a computer tool and a training workshop to improve the prescription of physical exercise in SpA by rheumatologists.

Methods: An online platform was developed for the individualised prescription of exercise to patients with SpA according to stage and with 3D animations (EJES-3D), which was presented in a training workshop. Tests were conducted before and after the workshop to assess the change in knowledge. Six months after the workshop, the degree of use and acceptance of the tool was evaluated through a survey aimed at rheumatologists and the fulfilment of the concepts learned through a survey of 100 consecutive patients attended in the centres of the attendees.

Results: The level of knowledge improved with the workshop (6.8/10 to 7.7). After 6 months 77.8% indicated that the contents of the workshop were useful and adapted to their expectations and all applied the knowledge. 22% stated that they prescribed exercise more regularly and 44% with greater confidence. 67% of rheumatologists considered the tool EJES-3D useful. The 82 patients who completed the survey agreed in their majority that they had been prescribed exercise, they had been informed and the messages received had been positive and coherent. 50% of the patients were prescribed specific exercises, which were qualified by them as simple, adaptable and attractive. And 64% were satisfied with the degree of exercise they performed. On the other hand, aspects to be improved at the tool and training level were identified.

Conclusions: The specialised training in the prescription of the exercise directed to the professionals who are in charge of the management of patients with SpA can be very beneficial to homogenise the type of exercise in each phase of the disease and help to gain confidence. In addition to having a specific tool (EJES-3D) to perform individualised prescription, it can be very useful.

REFERENCES:

1. Sociedad Española de Reumatología. Guía de práctica clínica sobre el manejo de los pacientes con Espondiloartritis [ESPOGUA] 2009 [Available from: http://www.ser.es/practicaClinica/espoguia/otros_tratamientos_4/rehabilitacion.php.
2. Braun J, van den Berg R, Baraliakos X, Boehm H, Burgos-Vargas R, Collantes-Estevez E, et al. 2010 update of the ASAS/EULAR recommendations for the management of ankylosing spondylitis. *Ann Rheum Dis* 2011;70(6):896–904.

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SAT0296

PATIENTS WITH DIFFUSE IDIOPATHIC SKELETAL HYPEROSTOSIS AND LOW BACK PAIN – EVALUATION AND REHABILITATION

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Background: Diffuse Idiopathic Skeletal Hyperostosis (DISH) generally occurs in people between the ages of 50 and 60, more often in men than women. Physical therapy and kinetic program may help delay the loss of motion in affected joints and control the low back pain (LBP). In most cases of DISH with LBP, certain muscles of the back that stabilise the spine are reflexively inhibited and do not spontaneously recover even if patients are pain free with a return to normal activity levels.

Objectives: In our observational study we evaluated the role of rehabilitation program in quality of life and assessed the thickness of the erector spinae (ES) muscle in these patients and to evaluate the correlation between thickness difference in three different trunk postures and functional parameters.

Methods: 38 male patients (61.5 years mean age) with DISH and LBP were enrolled in this study. Frontal (AP) and lateral lumbosacral regions were radiologically evaluated. Clinical and functional parameters were collected by a physiotherapist, that applied rehabilitation program (12 sessions of TENS, interferential current, ultrasound, aerobic training) and an US examination was performed by a physiatrist within 72 hours of the clinical examination. We performed ultrasonography to measure the thickness of the ES muscle at L4 and L5 level in maximum flexion, neutral posture, and maximum extension. All collected clinical and imaging data were statistical analysed, pre-post rehabilitation.

Results: Multivariate analysis showed that thickness differences between flexed and neutral, and flexed and extended maximally positions were correlated statistically with functional parameters (VAS and The Roland-Morris Disability Questionnaire score). We obtained a significant improvement in VAS ($p<0.01$) and Disability Questionnaire score ($p<0.05$) after supervised rehabilitation program.

Conclusions: Although ossification in DISH generally affects the ligament of the spine, pain is more likely to arise in correlation with the erector vertebral muscle status. Visual observation of the image during contraction indicates that US may

be a valuable biofeedback tool. Kinetic program (regular exercises that strengthen spine, walking and global stretching), avoiding sitting position for long periods of time, sleep on a correct mattress and optimal daily activities are the most important recommendations for all patients with DISH.

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SAT0297

THE ROLE OF BASELINE CONCOMITANT USE OF CONVENTIONAL SYNTHETIC DISEASE MODIFYING ANTI-RHEUMATIC DRUGS WITH TNF INHIBITORS IN SPONDYLOARTHRITIS PATIENTS

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Background: Conventional synthetic disease modifying anti-rheumatic drugs (csDMARDs) are drugs of choice in the treatment of rheumatoid arthritis and their concomitant use with TNFi is also of unequivocal importance. On the other hand there is limited evidence regarding the efficacy of csDMARD in axial spondyloarthritis (SpA) and concomitant use with TNFi are not recommended. However recently there is conflicting results about the comedication with csDMARD on the TNFi drug survival in patients with AS.

Objectives: To evaluate the effect of concomitant csDMARD use on first TNFi drug survival in patients with spondyloarthritis.

Methods: The data of patients that have been included in two Turkish registries (TURKBIO (n=356) and TReasure (n=1382)) with the diagnosis of ankylosing spondylitis (AS) or SpA obtained. Drug survival was calculated from the date of first TNFi prescription to the last visit or until the stop date of first biologic agent. For drug survival analysis Kaplan-Meier method with log-rank test. Cox proportional hazard method was used to evaluate the relative effects of each covariate on the drug survival.

Results: In total 1738 patients (1040 [59.1%] male, median [range] age 39^{16–81} years) with SpA initiating first TNFi were included in the analysis. Median disease duration was 116 months. 690 (39.7%) patients received adalimumab, 387 (22.3%) etanercept, 324 (18.6%) infliximab, 202 (11.6%) golimumab and 135 (7.8%) certolizumab. At the time of first biologic prescription 794 (45.7%) were using sulfasalazine or methotrexate. Baseline median BASDAI score was 60 (0–100), BASFI score was 46 (0–100), patient global assessment of disease activity was 70 (0–100), ESR was 23^{1–140} mm/h and median CRP value was 13 (0–659) mg/L. In our study group median drug survival time was 12 (0–205) months. In total 585 (33.7%) of our patients stop their first TNFi. 323 (55.2) patients discontinued the medication due to inefficacy, 133 (22.7) due to adverse effect. Drug survival was significantly better in patients using concomitant csDMARDs at baseline (with a median survival 104 vs 30 months; $p<0.001$; figure). In Cox regression model baseline age (HR 0.978, $p=0.028$), and concomitant csDMARD usage (HR 0.341, $p<0.001$) were found to be as the predictors for better drug survival, female sex (HR 1.546, $p=0.039$), presence of psoriasis (HR 3.803, $p=0.015$), enthesitis