processes in order to create awareness about the importance and value of each medical specialty, mainly in patients with moderate or severe disease activity.

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SAT0722-HPR THE VALIDITY AND TEST-RETEST RELIABILITY OF THE TURKISH PATIENT SPECIFIC FUNCTIONAL SCALE IN CHRONIC NECK PAIN PATIENTS

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Background: Current clinical guidelines recommend to use both clinical and self-reported measurements for evaluation of chronic neck pain. Among the self-reported outcomes, Neck Disability Index (NDI) and Patient Specific Functional Scale (PSFS) are the most widely used and recommended instruments.¹ Although, NDI was validated in Turkish language before, but no validation study related to the PSFS was detected in the literature.

Objectives: The purpose of our study was to determine the validity and reliability of PSFS which was not validated in Turkish language previously.

Methods: The PSFS has been translated into Turkish (PSFS-T) according to "translation-backward translation" method as recommended in the guidelines. Demographic data, PSFS-T, and NDI were recorded at the initial assessment. For the test-retest reliability analysis, the first 30 patients were called by phone. Intra-class correlation coefficient (ICC) was established for reliability analyses. The correlations between PSFS-T and NDI was examined for the validity analysis.

Results: The final form was completed by 110 chronic neck pain patients (F:77, M:33). The mean age of patients was 44±14 and the average duration of pain was 43±49 months. Test retest reliability of PSFS-T was found good level (ICC: 0.85). The relationship between PSFS-T and NDI was found moderate level ($p < 0.05$, $\rho = -0.578$). Furthermore, reading books/newspapers, cleaning and carrying heavy things were reported by Turkish neck patients as the first three activities which are the most problematic for their daily activities of life.

Conclusions: PSFS-T is a valid and reliable method of measuring outcome in patients with neck pain. Future studies should focus on the validity and reliability of PSFS-T in different populations.

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SAT0723-HPR COMPARISON OF PHYSICAL ACTIVITY, FATIGUE, HEALTH-RELATED QUALITY OF LIFE, ANXIETY AND DEPRESSION BETWEEN ANKYLOSING SPONDYLITIS AND RHEUMATOID ARTHRITIS PATIENTS

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Background: Rheumatoid arthritis (RA) and ankylosing spondylitis (AS) are chronic progressive inflammatory diseases, leading to joint damage and reducing the physical fitness of patients. They are among the most common rheumatic diseases. Physical inactivity, fatigue, low health-related quality of life (HRQoL), higher anxiety and depression levels are common problems reported in patients both ankylosing spondylitis (AS) and rheumatoid arthritis (RA) although the clinical manifestations differ in many ways. These low outcomes have been found to be associated with functional limitations in both AS and RA serves as mediators in the link between disease activity and functional limitations in spite of NSAIDs and DMARDs therapies. Although many studies have assessed the outcomes of a single disease state, either RA or AS, few studies have focused on a direct comparison between those both diagnostic groups.

Objectives: The aim of this study to assess and compare physical activity, fatigue, HRQoL, anxiety and depression levels between AS and RA patients.

Methods: Twenty-six RA patients and 18 patients with AS were recruited from the outpatient clinic. Physical activity was assessed using the International Physical Activity Questionnaire-Short Form (IPAQ-SF), a validated instrument comprising of four items that estimates the levels of vigorous activity, moderate activity, walking and time spent sitting during the previous 7 days. The Fatigue Severity Scale (FSS) was used to measure the severity of fatigue. Disease-specific instruments to measure (HRQoL) in patients with RA and AS (RAQoL and ASQoL) were used. The Hospital Anxiety and Depression Scale (HADS) were used to assess anxiety and depression. The patient groups were compared using the Kruskal-Wallis test and the Chi-square test.

Results: Disease durations were similar between RA (mean age=48.92±12.50 years, disease duration=10.81±7.68 years) and AS (mean age=43.44±12.36 years, disease duration=11.39±8.87 years) patients ($p=0.867$). There was no statistically difference between FSS (RA=45.27±16.95; AS=41.00±12.95; $p=0.173$), IPAQ-SF (RA=1289.65±839.75; AS=2110.06±1210.86; $p=0.062$) and HADS scores (RA=18.31±2.93; AS=17.00±2.87; $p=0.123$) in both patient groups.

Conclusions: Our results support that physical inactivity due to impaired mobility as well as fatigue, anxiety/depression and low (HRQoL) are common and similar features of both RA and AS. In conclusion, management of disease activity with drug therapies should be targeted not only to improve physical function for RA and AS but also to improve physical activity levels, restore fatigue, anxiety and depression levels and preserve HRQoL.

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SAT0724-HPR TECHNOLOGICAL ASSISTED REHABILITATION FOLLOWING TOTAL KNEE JOINT REPLACEMENT. A RANDOMISED CONTROLLED NON-INFERIORITY TRIAL

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Background: Supervised rehabilitation after total knee arthroplasty (TKA) has been suggested effective for quicker recovery. The effect of Technological Assisted Rehabilitation (TAR) in the participant's home compared to supervised rehabilitation has been investigated in trials and results suggest it being equal to supervised rehabilitation on short time follow-up (6 weeks to 4 months). No studies have been found that evaluate the effect of TAR on follow-ups longer than 4 months.

Objectives: The aim of this study was to evaluate the effect of TAR compared to supervised rehabilitation (usual care) on participants with TKA after 6 and 12 months.

Methods: This was a single-blinded, randomised controlled, non-inferiority study. 155 participants were randomised to either TAR (ICURA) or usual care. Intervention time was 6 weeks, follow-ups were after intervention, at 6 and 12 months. This study only concluded on 6 and 12 months. Primary outcome was 10 m walk test. Secondary outcomes were 2.45 m up and go, 30 s. Sit to Stand, active knee flexion and extension and the KOOS questionnaire. All outcomes were measured at all time points by a blinded assessor. Non-inferiority margin was no statistical significant- and less than 10% between group difference at 6 and 12 months, estimated by a repeated measurement analysis, adjusted for relevant baseline variables.

Results: Overall, the groups did not differ at baseline. No statistical between group difference was detected after 6 and 12 months for primary and secondary outcomes. A power analysis suggested severe lack of power to detect a statistical between group difference, due to high numbers of participants lost to follow-up after 6 and 12 months. The between group difference at 6 and 12 months was less than 10% for all outcomes except KOOS Quality of Life at 6 months, were a difference of 12.2% was detected, in favour of ICURA.

Conclusions: The results show that the effect of ICURA is equal to usual care after 6 and 12 months. Because lack of power after 6 and 12 months, the statistical significance should be interpreted with caution, but overall between group difference after 6 and 12 months was less than 10% for primary and secondary outcomes.

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SAT0725-HPR **COMPARATIVE ANALYSES OF RESPONSIVENESS BETWEEN THE RHEUMATOID ARTHRITIS IMPACT OF DISEASE (RAID) SCORE, OTHER PATIENT REPORTED OUTCOMES AND DISEASE ACTIVITY MEASURES: SECONDARY ANALYSES FROM THE ARCTIC STUDY**

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Background: The RAID score is a patient-derived patient reported outcome measure (PROM), developed by a EULAR task force, that assesses the impact of RA on seven important domains. Responsiveness of the RAID score was assessed in the preliminary validation,¹ but more data is needed on the sensitivity to change, especially compared to other PROMs and other conventional outcome measures.

Objectives: The objective of this study was to assess the changes in the RAID score in patients with early RA during the first six months of intensive DMARD treatment, and to evaluate the responsiveness of RAID after 3 months compared to other PROMs and conventional measures of disease activity.

Methods: RA patients with short disease duration were followed in the 24 month treat-to-target strategy ARCTIC trial.² The responsiveness of the RAID score was evaluated by calculating the Standardised Response Mean (SRM) followed by the Relative Efficiency (RE) with respect to the Ritchie Articular Index. SRMs and RE were also calculated for other PROMs and clinical outcome measures. An SRM with absolute value above 0.80 was considered high.

Results: 230 RA patients were included. The mean symptom duration was 7.09 ±5.40 (±SD) months, the baseline mean RAID score was 4.49±2.14. At the 3 month follow-up, the mean change score for RAID was -2.25±1.98 and the SRM was -1.13 (-1.33 to -0.96) (table 1).

Table Mean change±SD and standardised response mean (SRM) with 95% confidence intervals for patients reported outcomes and conventional disease activity measures at 3 and 6 months

	3 months		6 months	
	Change, mean±SD	SRM (95% CI)	Change, mean±SD	SRM (95% CI)
RAID	-2.25±1.98	-1.13 (-1.33 to -0.96)	-2.39±1.98	-1.21 (-1.38 to -1.06)
DAS	-1.71±1.04	-1.63 (-1.89 to -1.42)	-1.95±1.09	-1.80 (-2.04 to -1.60)
ESR	-10.9±15.0	-0.73 (-0.83 to -0.63)	-11.7±16.5	-0.71 (-0.84 to -0.59)
CRP	-9.68±18.4	-0.53 (-0.62 to -0.43)	-10.8±19.5	-0.55 (-0.63 to -0.48)
Swollen joint count	-8.86±6.89	-1.28 (-1.46 to -1.14)	-9.63±7.41	-1.30 (-1.46 to -1.17)
Ritchie Articular Index	-5.75±6.03	-0.95 (-1.12 to -0.80)	-6.33±6.30	-1.01 (-1.15 to -0.88)
Patient global assessment VAS	-28.3±24.2	-1.17 (-1.35 to -1.02)	-30.2±25.2	-1.20 (-1.38 to -1.05)
Physician global assessment VAS	-26.2±19.2	-1.37 (-1.54 to -1.22)	29.2±20.7	-1.41 (-1.58 to -1.27)
PROMIS physical function	14.8±13.7	1.08 (0.96 to 1.22)	15.5±14.0	1.11 (0.97 to 1.26)
Fatigue VAS	-13.3±29.3	-0.45 (-0.60 to -0.32)	-16.0±29.8	-0.54 (-0.68 to -0.40)
Joint pain VAS	-27.7±24.4	-1.14 (-1.31 to -0.98)	-29.5±25.2	-1.17 (-1.35 to -1.02)
SF-36 Physical component	8.99±9.02	1.00 (0.84 to 1.18)	9.19±9.47	0.97 (0.83 to 1.14)
SF-36 Mental component	3.89±10.6	0.37 (0.23 to 0.52)	3.02±10.8	0.28 (0.15 to 0.43)

The RAID score was more efficient in detecting change than the Ritchie Articular Index and also demonstrated relatively high efficiency in detecting change compared to other PROMs and clinical outcome measures (figure 1).

Abstract SAT0725HPR – Figure 1. Relative efficiency to tender joint count (Ritchie Articular Index) of the various outcomes reflecting disease activity at 3 months follow-up (Ritchie Articular Index = reference with a relative efficiency of 1.00).

Conclusions: The RAID score proved to be highly responsive to change in RA patients with short disease duration who followed a treat-to-target strategy. The RAID score was efficient in detecting change compared to other PROMs and conventional disease activity measures.

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SAT0726-HPR **IMPROVEMENT OF HAND FUNCTION, PHYSICAL CAPACITY AND QUALITY OF LIFE OF SYSTEMIC SCLEROSIS PATIENTS AFTER AUTOLOGOUS HEMATOPOIETIC STEM CELL TRANSPLANTATION**

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Background: Systemic sclerosis (SSc) is characterised by skin thickening and visceral involvement, leading to impairment of physical function, daily life activities and quality of life. Severe cases usually have poor prognosis, despite conventional immunosuppressive treatment. Autologous hematopoietic stem cell transplantation (AHSCT) has been investigated as treatment for patients with severe SSc and promotes reduction of skin thickening and at least stabilisation of visceral involvement. There are no reports in the literature addressing the influence of AHSCT on hand function and physical capacity of SSc patients.

Objectives: To evaluate the impact of AHSCT on skin involvement, hand function, physical capacity and quality of life (QoL) of SSc patients.

Methods: This is a prospective longitudinal study of a cohort of 27 SSc patients who underwent AHSCT at a University Hospital in the state of São Paulo, Brazil. Patients were evaluated before, and at 6, 12 and 24 months after transplant. The evaluations included modified Rodnan skin score (mRSS), hand function (hand-grip strength, finger-to-palm distance – FTP, range of motion measures, DASH and COCHIN questionnaires), mouth opening, six-minute walk test (6MWT) and quality of life questionnaire (SF-36). Results were subjected to statistical analyses and significance levels were established at p<0.05.

Results: Twenty-seven patients were evaluated before and at 6 months after transplant, 22 of which were additionally evaluated at 12 months, and 13 patients at 24 months post-transplant. At 12 months after AHSCT, patients presented significant improvement of mRSS (p<0.01), hand grip strength (p<0.01), range of motion of hands (p<0.01, except for 1 metacarpophalangeal joints of both hands), FTP distance (p<0.01), DASH (p<0.01), COCHIN (p<0.01), mouth opening (p<0.01), 6MWT distance (p=0.01), and physical (p<0.01) and mental (p=0.02) components of the SF-36, when compared to pre-transplant evaluations. Significant correlations were observed between skin involvement and range of motion measures (dominant hand: R=-0.65, p<0.01; non-dominant hand: R=-0.59,