Conclusions: The performance-based physical function measure ASPI was more sensitive to detect responders than the self-reported measure BASFI according to the ASAS20 response criteria in patients with axSpA after a high intensity exercise intervention. Our findings suggest that the performance-based physical function (ASPI) measure is preferable when evaluating physical function after exercise interventions with physical therapy.

Disclosure of Interest: None declared

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SAT0720-HPR MORE PRECISE MEASUREMENTS OF SPINAL MOBILITY WHEN ASSESSED WITH A SENSOR IN PATIENTS WITH AXIAL SPONDYLOARTHRITIS

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Background: Rotation of the spine is one of the principal movements of spinal motion. Cervical rotation (CR) is included in the assessment for monitoring axial spondyloarthritis (axSpA). Thoracolumbar rotation (TLR) is also known to be a valid measure for axSpA specific changes, but is seldom used due to lack of easy feasible measures. Goniometer or myrinometer (compass) is traditionally used to evaluate rotation. A sensor with excellent criterion validity and reliability for rotation in the range of motion from 10 to 120 degrees, that are able to detect changes of ≤ 1 degree, has recently been developed¹.

Objectives: To examine the concurrent validity between the sensor and compass in CR and TLR and to evaluate the usability and satisfaction with the sensor.

Methods: This study was part of the MOSKUS-study (Mobile mosculO Skeletal User Self-management). Patients with axSpA were included from two rheumatology outpatients' clinics and examined by experienced physiotherapists. CR and TLR were assessed three times with both the sensor and compass; mean score are used in the analyses. The measuring order was randomised. The sensor was considered gold standard. Group differences were assessed with paired sample t-test or Wilcoxon signed rank test, and agreement with Bland Altman plot. Time to conduct the test (instruction, conducting and note of results) was recorded for the 10 last included patients. Satisfaction was assessed both by the patients and assessors with numeric rating scale (NRS), (0–10, 10=highest satisfaction).

Results: A total of 60 patients with axial SpA and 2 assessors participated. Of the included patients 60% were male, median (min-max) age was 39^{20–73} years and 77% had radiographic axSpA. There were statistically significant differences in measure of rotation between the sensor and the compass of 3.7° in CR, $p=0.01$ and 9.2° in TLR, $p<0.001$ (table 1). The Band Altman plots show that the compass systematically measured lower rotation than the sensor in both CR and TLR (figure). There was no difference in time used to conduct the measurements. Patients satisfaction in CR measured with the sensor was mean (SD) 7.8 (2.4) and compass 6.7 (2.6), $p<0.001$ and in TLR 7.8 (2.4) and 7.3 (2.3), $p=0.08$ respectively. Assessors satisfaction in CR measured with the sensor was 9.0 (1.2) and compass 5.6 (2.8) $p<0.001$ and in TLR 8.1 (2.2) and 3.6 (2.2) $p<0.001$, respectively.

Abstract SAT0720HPR – Table 1. Characteristics of rotation measures, agreement and time to conduct measurements

Mobility	Measure	n	Mean (SD)	Mean difference (SD)	p-value	Time in sec, median (min-max), n=10	p-value
Cervical	Sensor	59	69.2 (18.2)			96 (44–216)	
	Compass	59	65.4 (18.2)	3.7 (10.0)	0.01	96 ^{62–150}	0.36
Thoraco-lumbar	Sensor	56	47.8 (11.8)			107 (36–200)	
	Compass	56	38.6 (10.3)	9.2 (9.5)	<0.001	86 ^{46–158}	0.92

Conclusions: Measure of CR and TLR were significantly lower when measured with a traditional compass compared to a digital sensor. There were no difference in time use and both patients and assessors were more satisfied with the sensor. The results suggest that the sensor gives more precise measurements of rotation and allow a feasible way to assess TLR in daily clinical practise.

Abstract SAT0720HPR – Figure 1. Bland Altman plot of cervical rotation and thoracolumbar rotation measured with the sensor and compass.

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SAT0721-HPR IMPROVEMENT IN CLINICAL RESULTS BY ENHANCING ADHERENCE TO A HEALTHCARE MODEL IN RHEUMATOID ARTHRITIS

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Background: A Centre of Excellence (CoE) healthcare model aims to obtain a high quality results from the appropriate and minimal use of resources in rheumatoid arthritis (RA); Enhancing adherence of patients to healthcare model and treatment using a Treat to Target approach and patient education has demonstrated the improvement of patient conditions and clinical results.¹

Objectives: To describe the adherence patterns to a centre of excellence model and clinical outcomes in patients with RA in a specialised centre. For this study researchers defined adherence as the attendance to an appointment with our healthcare team for more than three times during 12 months.

Methods: We reviewed the clinical records of patients with RA in a specialised centre during a 12 month period. We included socio demographic variables and the attendance to consultations to rheumatology, psychiatry, physical therapy, occupational therapy, nutrition, and psychology consultations. Descriptive epidemiology was done, percentages and averages were calculated We analysed bivariate association with Pearson's χ^2 .

Results: We included 5413 patients, where 83% were female and 17% were male; mean age was 59 years $\pm$ 12. Mean DAS28 of patients was 2.82 $\pm$ 0.84, where 46% of patients were on remission, 27% in low disease activity, 24% in moderate disease activity and 3% in severe disease activity. The specialty where the adherence was higher was in rheumatology 98%, followed by psychiatry 33%, psychology 29%, physical therapy 28%, occupational therapy 20% and nutrition 13%. In our study 47% of patients were considered as adherents; from all patients who were adherent 75% were in remission or low disease activity. When we compared disease activity with the attendance to all specialties there was statistical association between disease activity and the patients who attended to more than four visits.

Conclusions: Patients who attend satisfactory to a multidisciplinary healthcare approach team can achieve better results compared to those who doesn't attend to all medical specialties; thus it is relevant to implement patient education