FRI0301

DO PATIENTS AND PHYSICIANS AGREE ON THE DEFINITION OF REMISSION AND LOW DISEASE ACTIVITY IN AXIAL SPONDYLOARTHRITIS?

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Background: Current recommendations for axial Spondyloarthritis (axSpA) include the treat-to-target concept and suggest that the ideal target should be remission or low disease activity (LDA). Also, the importance of a shared decision is highlighted. Unfortunately, the definition of remission is not consensual, and most of the definitions are difficult to evaluate in clinical practice

Objectives: To propose an evaluation of remission by a single question to the patient, by comparing it to the different available definitions. To analyze the metric properties of the current definitions against patient's perception

Methods: One-center cross-sectional study in a tertiary care hospital including consecutive patients with a diagnosis of axSpA (and fulfilling the ASAS criteria) were included between February to November 2019. Patient's perception of remission and LDA was evaluated by a single question. Physician's perception of remission and LDA was assessed identically. The level of agreement between patients' perception and the other available definitions was tested by the Prevalence and Bias adjusted Kappa (PABAK). The metric properties Sensitivity (S) and Specificity (Sp) of the available definitions (BASDAI cut-offs, ASDAS disease states, ASAS criteria for partial remission and patient acceptable symptom state), were tested against the patients perspective, as the gold standard.

Results: A total of 105 axSpA patients were included. 63,8% were males and 67,6% had radiographic sacroiliitis (Table 1). 21% and 72% of them considered themselves in remission and LDA, respectively. Physician's perception was 45,7% and 81% for remission and LDA, respectively. The prevalence of the different definitions are shown in Figure 1. The best agreement for patients' perception of remission was found with a BASDAI <2 + normal CRP (Table 2). This definition was also the most sensitive (S=72,7%) and specific (Sp=83,1%) when taking the patient's perception as a reference.

Table 1. Characteristics of 105 patients with axSpA

	All (N:105)	Patients in self-defined REM (N:22)	Patients in self-defined LDA (N:54)	Patients No REM no LDA (N:29)
Male, n (%)	67 (63,8)	18 (81,8)	34 (63)	15 (51,7)
r-axSpA, n (%)	71 (67,6)	17 (77,3)	33 (61,1)	21 (72,4)
Mean age, years (SD)	49 (13)	51(15)	47 (13)	50 (11)
Mean AxSpA duration, years (SD)	12,2 (13)	17,1 (16,2)	11,2 (11,7)	10,3 (12,3)
HLA-B27+, n (%)	72 (69,2)	17/22 (77,3)	33/54 (61,1)	22/28 (78,6)
Data from 104				
Periferic arthritis, n (%)	34 (32,4)	7 (31,8)	17 (31,5)	10 (45,4)
Uveitis, n (%)	22 (21)	6 (27,3)	10 (18,5)	6 (20,7)
Biological treatment, n (%)	43 (41)	14 (63,6)	19 (35,1)	10 (34,5)
CRP, mean (SD)	3,61 (5,36)	2,31 (2,17)	2,84 (3,87)	6,04 (8,14)
ASDAS, mean (SD)	1,78 (1,08)	0,98 (0,71)	1,63 (0,89)	2,68 (1,03)
BASDAI, mean (SD)	3,35 (2,32)	1,39 (1,30)	3,13 (1,84)	5,26 (2,33)
BASFI, mean (SD)	2,81 (2,45)	1,24 (1,37)	2,57 (2,00)	4,43 (2,92)

Table 1.REM: Remission; LDA: Low Disease Activity; SD: Standard Deviation; CRP: C-Reactive Protein IBD: Inflammatory Bowel Disease.

Fig. 1. REM/LDA: remission/ low disease activity self-defined patient or physician through a simple question. ASDAS <1,3: inactive disease; ASDAS <2,1: low activity; PGA: Patient global assessment; PASS: Patient acceptable symptom state.

Table 2. Agreement between different definitions of remission

	ASDAS <1,3	BASDAI<2+ Normal CRP	PGA ≤1	Physician REM	Patient REM
ASAS PR	0.53 (0.58)	0.59 (0.68)	0.76 (0.83)	0.22 (0.26)	0.39 (0.56)
ASDAS <1,3		0.64 (0.68)	0.50 (0.56)	0.44 (0.45)	0.28 (0.37)
BASDAI <2+			0.60 (0.69)	0.25 (0.28)	0.50 (0.62)
Normal CRP					
PGA ≤1				0.20 (0.24)	0.42 (0.62)
Physician REM					0.20 (0.24)

Agreement is presented as Cohen's Kappa (PABAK: prevalence and bias adjusted kappa).

Patient and Physician remission (REM) are based on the single question; ASAS PR:

ASAS partial remission; PGA: Patient global assessment.

Conclusion: In this real-life population, the evaluation of remission by the patient through a single question was shown to be feasible and to present an acceptable agreement with other definitions.

References:

[1] Gorlier C, et al. Ann Rheum Dis 2019;78(2):201-8.

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FRI0302

WHAT IS THE IMPACT OF DISCREPANCY BETWEEN CENTRAL AND LOCAL READERS IN EVALUATION OF MRI SCANS ON THE CLASSIFICATION OF AXIAL SPONDYLOARTHRITIS? DATA FROM THE ASAS CLASSIFICATION COHORT STUDY

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Background: Active MRI lesions typical of axial spondyloarthritis (axSpA) were reported in 61.6% and 2.2% of axSpA and not-axSpA patients, respectively, from the ASAS classification cohort (ASAS-CC)¹. Discrepancy between local and central reader evaluation of MRI scans could result in differences in numbers of patients fulfilling the imaging arm of the ASAS classification criteria. But final classification may not be impacted if discrepant patients still fulfill the clinical arm.

Objectives: We aimed to assess the impact of reader discrepancy in detection of active MRI lesions on the number of patients classified as having axSpA in patients recruited to the ASAS-CC.

Methods: MRI images of the sacroiliac joints (SIJs) were available from 252 cases in the ASAS-CC, and these also had clinical and radiographic data. Seven central readers from the ASAS-MRI group recorded MRI lesions in an eCRF that included active lesions typical of axSpA in the SIJ (MRI-active) that was worded exactly the same as in the original ASAS-CC eCRF permitting comparisons between central and local site readers. Active lesions were deemed to be present according to majority agreement (≥4/7) of central readers and also any 2 central readers. We calculated the number of patients that were classified differently after central evaluation for overall fulfilment of the ASAS criteria and for the imaging arm.

Results: Discordance between central and local readers for detection of MRI-active was recorded in 45(17.8%) and 47(18.2%) of cases according to 2-reader and majority (≥4/7) central reader data, respectively (kappa (95%CI) of 0.64 (0.54-0.73) and 0.62 (0.53-0.72). With central reading as external standard the false-positive rate for active lesions was 26.9% and 32.2% ('local overcall') for 2-reader and majority reader data, respectively. There were 159(63.1%) patients who fulfilled the ASAS axSpA criteria based on local-reading, and 148(58.7%) and 143(56.7%) patients based on 2-reader and majority central-reading, respectively (Table). When fulfillment of the imaging arm was the primary consideration