

Depressive symptoms are associated with higher disease activity and worse functional status in axSpA: a cross-sectional analysis from RABBIT-SpA

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Background

Axial spondyloarthritis (axSpA) is a potentially severe chronic inflammatory disease with impact on function and quality of life. Depression may influence outcome, especially patient reported outcomes (PROs).

Objective

The **aim** was to assess differences in baseline characteristics and outcome parameters between patients with and without symptoms of depression using WHO-5 Score.

Patients and Methods

Patients from the Rabbit-SpA cohort study with axSpA and a WHO-5 score at baseline were included in this analysis.

The WHO-5 score ranging from 0-100 was used to separate patients into two analysis groups:

- ≤28: moderate to severe depressive symptoms
- >29: mild depressive symptoms/good well-being

For the two analysis groups the following outcome parameter were compared: Physician global disease activity, BASDAI, BASFI, ASDAS, ASAS-HI, patient global disease activity, pain, and sleep.

Spearman correlation coefficient was calculated to analyse the relationship between WHO-5 score and outcome parameters.

Results

Among 799 included patients

- 240 (30%) had moderate to severe depressive symptoms,
- 246 (31%) had mild depressive symptoms and
- 313 (39%) reported well-being.

Baseline characteristics as inflammatory back pain, enthesitis as well as the number of enthesal sites were higher in the group of patients with moderate to severe depressive symptoms. For all other baseline parameters there are no differences between the two analysis groups.

Results

	WHO-5 ≤28 (n=240)	WHO-5 >28 (n=559)	Total (n=799)
Age (years), mean (SD)	44 (12.2)	44.4 (13.1)	44.3 (12.8)
Female, n (%)	111 (46)	247 (44)	358 (45)
Disease duration (years), mean (SD)	6.7 (8.7)	6.8 (8.8)	6.8 (8.8)
ASAS criteria fulfilled, n (%)	192 (80)	441 (79)	633 (79)
Inflammatory back pain, n (%)	211 (88)	448 (80)	659 (83)
Enthesitis, n (%)	52 (22)	87 (16)	139 (18)
Enthesitis, number of sites (), mean (SD)	0.6 (1.7)	0.4 (1.3)	0.5 (1.4)
Arthritis, n (%)	68 (29)	144 (26)	212 (27)
Arthritis joint count (0-44), mean (%)	1.4 (3.9)	0.8 (2.1)	1 (2.8)
HLA-B27 positive, n (%)	161 (72)	387 (74)	548 (74)
CRP positive (≥5 mg/L), n (%)	122 (59)	258 (54)	380 (55)

Table 1: Baseline characteristics

All analysed outcome parameters were significantly worse in the group of patients with moderate to severe depressive symptoms in comparison to other patients.

	WHO-5 ≤28 (n=240)	WHO-5 >28 (n=559)	Total (n=799)
Physician global disease activity (0-10)	6.1 (1.6)	5.3 (2)	5.6 (1.9)
ASDAS	3.5 (0.8)	2.8 (0.9)	3 (1)
BASDAI (0-10)	6.1 (1.6)	4.2 (1.8)	4.8 (2)
BASFI (0-10)	5.4 (2.2)	3.3 (2.2)	3.9 (2.4)
ASAS-HI (0-17)	9.8 (3.1)	5.7 (3.1)	6.9 (3.6)
Patient global disease activity (0-10)	7 (1.9)	5.3 (2.3)	5.8 (2.3)
Patient pain (0-10)	6.9 (1.9)	5.2 (2.3)	5.7 (2.3)
Patient sleep (0-10)	7.1 (2.4)	4.6 (2.9)	5.4 (3)

Table 2: Outcome parameter, all values are given as mean (SD)

Conclusions

- ✓ Almost one third of patients reported scores indicative of depressive symptoms and depression.
- ✓ The strong correlation of WHO-5 scores with patient and physician reported outcomes may be relevant for the management of patients with axSpA.

Results

All outcome parameters, except for arthritis joint count, show a significant correlation with WHO-5 score.

The WHO-5 score correlates significantly with BASDAI for women ($\rho=-0.54$) and men ($\rho=-0.59$) (Figure 1).

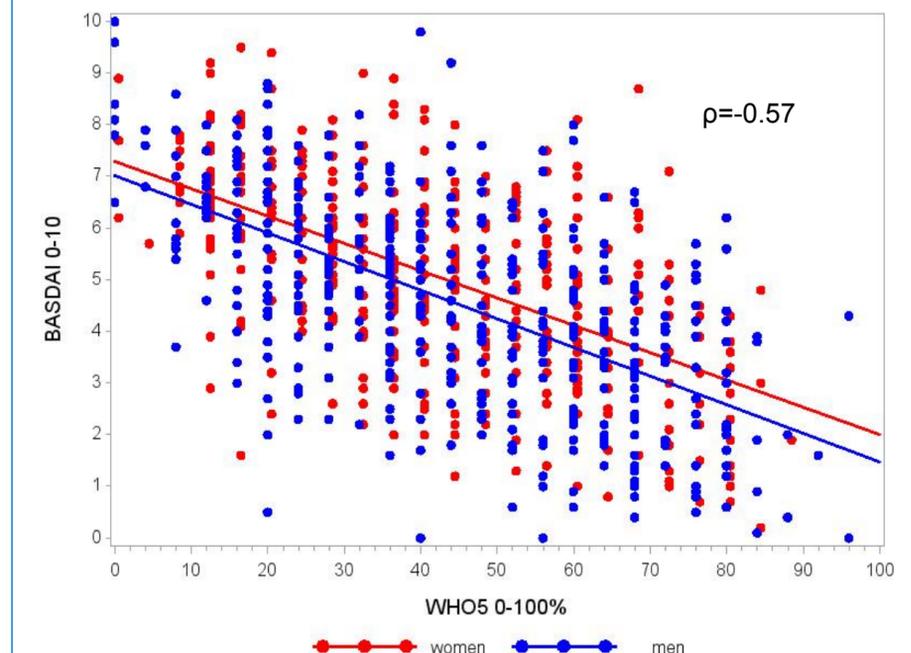


Figure 1: Correlation between WHO-5 Score and BASDAI

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