



16. Depressive Symptoms at Baseline Predict Higher Simple Disease Activity Index (SDAI) Scores and Longer Time to Remission in Patients with Recent-Onset Arthritis.

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Objective(s): To determine if depressive symptoms at inclusion influence Simple Disease Activity Index (SDAI) scores and time to SDAI remission in patients with recent-onset arthritis (EPA) treated with the objective of 0/66 swollen joint.

Method(s): Patients were recruited consecutively as part of the EUPA cohort if they presented with immune-mediated arthritis affecting at least 3 joints for 1 to 12 months. Demographics, SDAI, M-HAQ, Sharp-van der Heijde (SHS) radiological scores, Rheumatoid Factor and anti-CCP2 status, tobacco use and treatment data were collected at baseline and at 12, 18, 30 and 42 months after disease onset. Center for Epidemiological Studies Depression Scale (CES-D; 20 items) questionnaires were completed at each visit. Spearman correlations were evaluated between CES-D scores and SDAI. Comparison of CES-D scores during follow-up was evaluated with Friedman test and with generalised estimating equation for dichotomous CES-D scores. Log-transformed SDAI scores were used to compute univariate and multivariate linear regression. Kaplan Meier and Cox regression were used to assess time to remission.

Result(s): 254 EPA patients were eligible (median (IQR) age 60.6 (51.8-69.8) years; median (IQR) symptom duration 3.8 months (2.3-6.4); 62.2% women). CES-D scores decreased from inclusion to the last follow-up ($p < 0.0001$). At inclusion, 18, 30 and 42 months, 46%, 21%, 17% and 19% of patients had a CES-D score ≥ 19 (the cut-off score for patients with chronic pain, suggestive of clinical depression), respectively ($p < 0.0001$). Weak but significant correlations ($r \approx 0.18$, $p < 0.05$ at 18, 30 and 42 months) were found between baseline CES-D scores and follow up SDAI scores; moderate correlations ($r = 0.34$ at 18 months and 0.40 at 30 months) were found between concomitant CES-D scores and SDAI scores. Kaplan-Meier curves revealed a longer time to SDAI remission in patients with a CES-D ≥ 19 at inclusion (median time 22 vs 32 months, $p = 0.01$). In a multivariate linear regression model, baseline CES-D, age and BMI predicted SDAI at 30 and 42 months.

Conclusion: Depressive symptoms decreased over time in treated EPA patients. The correlations between CES-D and SDAI scores were highest when assessed concomitantly, although a significant correlation was observed between baseline CES-D and follow-up SDAI at 18, 30 and 42 months, suggesting that patients with higher CES-D scores at baseline took longer to attain remission. Assessment of depressive symptoms at all visits may identify a condition that represents a treatable hurdle to attain remission and to improve patients' outcome.