

**OBESITY AND ASSOCIATED FACTORS IN NORWEGIAN AXIAL SPONDYLOARTHRITIS PATIENTS. RESULTS FROM THE EUROPEAN MAP OF AXIAL SPONDYLOARTHRITIS SURVEY**

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**Background:** Obesity increases the risk of developing chronic inflammatory diseases, including axial spondyloarthritis (axSpA)<sup>1,2</sup>. Information about how obesity correlates with disease activity in axSpA patients is limited.

**Objectives:** The objective of this survey was to investigate the association between body mass index (BMI) and patient reported disease activity in Norwegian axSpA patients.

**Methods:** The European Map of Axial Spondyloarthritis (EMAS), conducted from July 2017 to February 2018, was a cross-sectional on-line survey of 2,846 unselected patients with self-reported axSpA from 13 European countries (Austria, Belgium, France, Germany, Italy, Netherlands, Norway, Russia, Slovenia, Spain, Sweden, Switzerland, and the UK). Participants were recruited through an on-line panel and patient organizations. This analysis is based on data from the 509 Norwegian respondents. Sociodemographic variables (age, gender, BMI, comorbidity), and disease related variables (Bath Ankylosing Spondylitis Disease Activity Index (BASDAI) (0-10), self-reported spinal stiffness (3-12) and General Health Questionnaire (0-12) (GHQ-12)) were reported.

**Results:** Out of the 509 Norwegian participants with axSpA, 69.7% (N:355) were women. The mean age was 48±12 years, mean disease duration was 5.3±2.0 years, 82.3% were HLA-B27 positive, and 55.2% (N:281) were university educated. In total, 35% (N:180) of the participants were normal/underweight (BMI < 25) and 65% (N:329) were overweight/obese (BMI >25). The mean (sd) disease activity, as measured by BASDAI (0-10), was 5.3±2.0. Overweight/obese patients reported significantly higher disease activity (BASDAI 5.5±1.9) compared to normal weight patients (BASDAI 5.0± 2.1). Moreover, being overweight/obese was associated with a significantly higher degree of spinal stiffness, number of comorbidities and a numerically, but not significantly, higher GHQ-12 score. There was no significant differences in alcohol consumption, smoking, or prevalence of inflammatory bowel disease (Crohn's disease or ulcerative colitis).

**Conclusion:** Norwegian overweight/obese axSpA patients from the EMAS survey report significantly higher disease activity, spinal stiffness and number of comorbidities. The results highlight the serious impact of overweight and obesity on the health status of axSpA patients. Therefore, obesity should be considered as a preventable risk factor and within the disease management of axSpA.

**REFERENCES**

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