

ABSTRACT NUMBER: 1704

# Prevalence of Obesity and Metabolic Syndrome in Patients with Axial Spondyloarthritis

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## SESSION INFORMATION

Date: Monday, November 9, 2015

Session Type: ACR Poster Session B

Session Title: Spondylarthropathies and Psoriatic Arthritis - Comorbidities and Treatment Poster II

Session Time: 9:00AM-11:00AM

**Background/Purpose:** Estimate the prevalence of Obesity (O) and Metabolic Syndrome (MS) in AxSpA and evaluate its association with sociodemographic and clinical variables.

**Methods:** We included patients  $\geq 18$  yrs diagnosed with AxSpA (ASAS criteria and/or NY criteria) belonging to ESPAXIA cohort. Socio-demographic data (age, sex, occupation, education), disease characteristics (disease duration, extra-articular manifestations, comorbidities, current treatment) and cardiovascular risk factors (smoking, hypertension, diabetes, dyslipidemia and sedentary) were collected. Physical examination was performed: height (cm), weight (Kg), abdominal circumference (cm), blood pressure (average of two measures), swollen joint count (44), enthesitis (MASES index). BMI was calculated. Patients were classified according to WHO in Normal: BMI 18.5-24.9; Overweight: BMI  $\geq 25$ ; and Obesity: BMI  $\geq 30$  (grade I: BMI 30-34.9, II: BMI 35-39.9 and III: BMI  $\geq 40$ ). The MS was evaluated according to NCEP ATP III and ALAD (Latin American Diabetes Association). Radiographs of cervical spine, lumbar spine and sacroiliac joints were evaluated by a blinded observer using mSASSS index (ICC  $\geq 0.90$ ). Glucose, lipid analysis, ESR and CRP were tested. All patients completed self-reported questionnaires BASDI, BASFI and ASQoL. *Statistical analysis:* Univariate and multivariate analysis were performed to evaluate association of MS and O with socio-demographic and clinical variables.

**Results:** 187 patients were included, 74.2% were male with median age of 45 yrs and median disease duration of 18.5 yrs. Median weight was 77.5 kg, median height 169 cm and median BMI was 26.67 (23.7-29.44). 33.7% had normal BMI, 42.8% overweight and 23.5% obesity (65% grade I, 20.5% grade II, 13.6% grade III). Obese patients had longer disease duration ( $24.5 \pm 14.55$  vs  $16.8 \pm 12.8$  yrs,  $p=0.01$ ), were older ( $51.7 \pm 13.7$  vs  $41.3 \pm 13.8$  yrs,  $p=0.001$ ), had worse functional capacity (BASFI  $4.9 \pm 2.8$  vs  $3.5 \pm 2.5$   $p=0.02$ ) and poorer quality of life (ASQoL  $8.3 \pm 4.7$  vs  $3.5 \pm 2.5$   $p=0.02$ ) compared to patients with normal BMI. In multivariate analysis adjusting for age and disease

duration only male sex was associated with obesity. 117 patients had complete data to evaluate MS. 73.5% were male, with median disease duration of 19.5 yrs. 28 patients met criteria of MS by ATP III and 27 by ALAD. Patients with MS were older ( $55.7 \pm 9.6$  vs  $43.1 \pm 12$  yrs,  $p=0.0001$ ), had longer disease duration ( $24.6 \pm 10.3$  vs  $18.5 \pm 12.2$  yrs,  $p = 0.01$ ), higher frequency of cardiovascular complications (60.7% vs 34.8%  $p=0.02$ ), hepatobiliary diseases (39.3% vs 19.1%  $p=0.04$ ) and alcohol consumption (21.4% vs 5.6%,  $p=0.02$ ). They also had higher radiological damage (mSASSS  $42.9 \pm 2.8$  vs  $23.1 \pm 25.7$   $p=0.02$ ), which remained significant after adjusting for disease duration. The presence of MS did not have influence on other disease variables.

**Conclusion:** 23.5% of our AxSpA patients were obese and 23% fulfilled MS criteria. Obesity was higher in men and those patients with MS had higher radiological damage.

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