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Title: Daytime sleepiness and cardiovascular complications in moderate to severe obstructive sleep apnoea (OSA) patients

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Body: OSA is recognized as an important risk factor for cardiovascular complications. Some previous studies revealed an association between excessive daytime sleepiness and blood pressure profile and other cardiovascular diseases. The aim of this study was to estimate a frequency of cardiovascular complications in OSA pts with and without daytime sleepiness assessed by the Epworth Sleepiness Scale (ESS), ESS ≥ 11 points vs. ESS ≤ 10 points respectively. 1078 consecutive OSA pts were examined (AHI=39.5 \pm 21.7, BMI=34.1 \pm 6.4 kg/m², mean SaO₂=90.8 \pm 5.7%, ESS=11.3 \pm 5.8 points). ESS ≤ 10 points was found in 490 pts (45.4%), ESS ≥ 11 was found in 588 pts (54.5%). Comparison of both groups is shown in the table below.

Variable	ESS ≤ 10	ESS ≥ 11	p
Age (years)	58.6 \pm 10.3	54.4 \pm 10.2	p<0.0001
BMI (kg/m ²)	33.1 \pm 5.9	35.0 \pm 6.6	p<0.0001
AHI (n/h)	36.4 \pm 20	42.1 \pm 22.8	p<0.0001
T90 (%)	22 \pm 25.7	30.7 \pm 30.5	p<0.0001
Mean SaO ₂ (%)	91.5 \pm 5	90.3 \pm 6.1	p=0.0007
Arterial hypertension (n/% of pts)	366 (74.7%)	429 (73.1%)	NS
Coronary artery disease (n/% of pts)	128 (26.1%)	115 (19.6%)	p=0.01
Heart failure (n/% of pts)	56 (11.4%)	65 (11%)	NS
Atrial fibrillation (n/% of pts)	50 (10.2%)	40 (6.8%)	p=0.04
Stroke (n/% of pts)	15 (3.1%)	27 (4.6%)	NS
Diabetes (n/% of pts)	93 (19%)	131 (25.4%)	NS

Conclusions: OSA subjects with daytime sleepiness were younger, more obese and presented with significantly more severe disease (higher AHI and T90 and lower mean SaO₂). Higher prevalence of CAD and atrial fibrillation was found in OSA subjects without daytime sleepiness.