**Excessive daytime sleepiness as cardiovascular risk in Croatian obese patients**

**KEYWORDS:** excessive daytime sleepiness, cardiovascular risk, obesity, hypertension.

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**Introduction:** Excessive daytime sleepiness (EDS) is a very common complaint, especially in obese patients and is a potentially alarming symptom related to many risk factors and comorbidities. In obese patients obstructive sleep apnea (OSA) is quite common. Our goal was to assess the connection between EDS and hypertension in Croatian obese patients.

**Patients and Methods:** This cross-sectional study was carried out in a tertiary healthcare centre in an outpatient clinic for treatment of obesity. 49 participants were included. Inclusion criterion was BMI > 30 kg/m². Epworth Sleepiness Scale (ESS), consisting of 8 questions, every question ranged from 0-3 (overall range 0-24) was used to assess EDS. Spearman correlation coefficient, Welch t-test, chi-squared test and regression analysis were used. They were divided into 4 and 3 categories. Many researches take ESS score 10 or greater as excessive daytime sleepiness, so our results were also interpreted as 3 categories: 0-7, 8-9 and 10 or greater.

**Results:** Mean age of our participants was 50.29 ± 11.91 years. Overall mean BMI was 44.64±8.12 kg/m². Results on ESS divided into 4 categories (Figure 1) were statistically significant correlated to hypertension: χ²= 9.61; p = .02. Also, results on ESS in 3 categories (Figure 2) were statistically significant correlated to hypertension: χ²(2) = 9.43; p = .009. Results on ESS were not significantly connected to AHI index (ESS in 4 categories: χ²(9)=8.43, p=.49; ESS in 3 categories : χ²(6)=6.45, p=.37). Furthermore, results on ESS were not correlated to sex (ESS in 4 categories x²(3)=0.85, p=.84 and ESS in 3 categories: x²(2)=0.56, p=.76).

**Conclusion:** Our results show that the presence of hypertension alters the result on the ESS and is most visible in the so-called “borderline” area for the ESS score 8-9 in both divisions (into 3 and 4 categories), which shows a possible underestimation of the risk of the population achieving the result on the ESS <10, which is consistent with the studies of Borsini et al.²

**LITERATURE**