

## **CAN THE EPWORTH SLEEPINESS SCALE BE A PREDICTOR OF OBSTRUCTIVE SLEEP APNEA AND RELATED ENDOTHELIAL DAMAGE?**

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Obstructive sleep apnea (OSA) is a common disease, so there is a need for an effective diagnostic screening test. For many years the Epworth Sleepiness Scale (ESS) has been used. The study aimed to establish if the higher result of the ESS test can be a predictor of OSA diagnosis and severity or OSA-related endothelial damage. OSA-suspected subjects without inflammatory diseases were qualified for polysomnography. We qualified 93 non-diabetic persons (CRP<8mg/l, aged 27-75), to study groups based on ESS results: ESS-1 (0-10), ESS-2 (11-14), ESS-3 (15-18) and ESS-4 (above 18). We compared the ESS results with that of polysomnography, and then with serum concentration of CRP, IL-6, E-L-P- selecting, and PSGL-1 – the well-known inflammatory and endothelial dysfunction markers. In the study groups, there were no statistically relevant differences in apnea-hypopnea Index, mean and minimal blood saturation during sleep, CRP, IL-6, S-E-L-selectin, and PSGL-1 serum concentration. In OSA patients, we did not find a relationship between ESS results and OSA diagnosis/severity. We also did not find a relationship between ESS and serum concentration of endothelial damage and inflammatory markers. There is a need to search for better than ESS screening tests for OSA.