

ideal apnea-hypopnea index (AHI) threshold for reliable SN-PSG.

**Method:** We investigated 134 consecutive patients who were diagnosed with OSA (AHI  $\geq 5$ ). We divided the raw data from the full-night study into two parts, and compared the data from the first 2 hours of sleep with the full-night sleep data to evaluate the diagnostic precision and accuracy of the first 2 hours of sleep.

**Results:** No difference in AHI was observed between the first 2 hours of sleep and the full night of sleep. A significant correlation between the AHI of the first 2 hours of sleep and the full night of sleep was observed for severe OSA patients (AHI  $\geq 30$ ) only. Moreover, a severe OSA criteria of AHI  $\geq 30$  was more significantly correlated with the full night of sleep than an AHI  $\geq 40$  ( $r = 0.831$  and  $r = 0.778$ , respectively), which is the current criteria for SN-PSG. However, the diagnostic accuracy was the same for both criteria (87.3%).

**Conclusions:** This study suggests that the current AASM guidelines for SN-PSG may need to be modified in Asian patients.

#### 470 - Evaluation of autonomic function in patients with obstructive sleep apnea syndrome

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**Objectives:** Obstructive sleep apnea syndrome (OSAS) is a condition in which over-repeating obstruction of upper airway during sleep. In the present study, we aimed to evaluate the autonomic functions in patients with moderate to severe OSAS.

**Methods:** Totally, 29 patients in Eskişehir Osmangazi University Medical Faculty, Sleep Center of the Department of Neurophysiology diagnosed as moderate to severe OSAS by polysomnography (PSG) and classified according to American Academy of Sleep Medicine (AASM) International Scoring were included in the study. The control group consisted 30 healthy individuals. Electrophysiological autonomic nervous system functions were evaluated by sympathetic skin response (SSR) for sympathetic nervous system and RR interval variability (RRIV) for parasympathetic nervous system during rest and after hyperventilation (HV).

**Results:** The patient group consisted 32 patients [5 women (15,7%) and 27 men (86,3%)] while the control group consisted 30 healthy volunteers [18 women (60%) and 12 men (40%)]. The mean age was  $47.3 \pm 9.1$  for the patient group and  $43.5 \pm 12.2$  for the control group. In the patient group, 13 patients had moderate OSAS and 19 patients had severe OSAS. No statistically significant difference was found between the mean SDY latency, RRIV and HV-RRIV between groups ( $p > 0.05$ ).

**Conclusions:** In our study, no statistically significant autonomic dysfunction could be found in patients with OSAS. When compared with the controls. We aim to increase the sample size which has a homogenous distribution between cases.

**Keywords:** OSAS, autonomic, RRIV

#### 419 - Comparing a portable sleep apnea screener with standard polysomnography in sleep clinic patients

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**Objectives:** Obstructive sleep apnea (OSA) is a common disease with serious consequences. Many portable devices have been developed to overwhelm some of limitations in the accessibility of the gold standard test, polysomnography (PSG). This study compares a portable sleep apnea screener to PSG in a sleep clinic population.

**Methods:** Patients admitted to the sleep lab with OSA or other sleep disorders were recruited during a 3-month period. These participants underwent one night simultaneous recording of PSG and a double channel portable sleep apnea screener in the laboratory. A sleep physician (certified by board of registered polysomnographic technologists) scored the PSGs manually according to standard criteria. Portable sleep apnea screener data were analyzed automatically with the manufacturer's proprietary software. We compared the apnea-hypopnea indices (AHI) from the PSG and the portable sleep apnea screener to assess the specificity and sensitivity of the device.

**Results:** One hundred and twenty patients completed the study. The mean age of the participants