Abstract 2793
Effect of CPAP treatment on the incidence of cardiovascular events and hypertension in non-sleepy OSAS patients. A long-term RCT.
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Abstract Body
Aim: To evaluate the effect of CPAP treatment on the incidence of cardiovascular events (CVE) or hypertension, in a cohort of non-sleepy patients with obstructive sleep apnea (OSA).

Methods: We have included 724 consecutive patients with an apnea-hypopnea index (AHI) > 20h⁻¹ and Epworth sleep scale (ESS) < 10 from 14 university hospitals in Spain. Subjects with hypertension at baseline were not excluded (n= 374). Patients were randomized to CPAP (n=358, 87% males, 52±11 yrs, ESS 6.5±2, AHI 46±21 h⁻¹) or to conservative treatment (n=366, 83% males, 52±11 yrs, ESS 6.5±2, AHI 39±18 h⁻¹). Patients were followed during a median of 4 years and the composite outcome was CVE or new diagnosis of hypertension.

Results: We registered 58 CVE and 148 new cases of hypertension. The ratio of incidence density (IDR) of CPAP group vs. conservative treatment was 0.83; 95% CI (0.63, 1.1) p=0.195. In the subgroup of patients with hypertension at baseline, the corresponding IDR was 0.63; 95% CI (0.33, 1.19) p=0.158. Mean CPAP compliance was 4±2 h/night. In the sample of patients that used CPAP > 4h/night the IDR vs. conservative treatment was 0.72; 95% CI (0.52, 0.98) p= 0.039 while in patients with hypertension at baseline the corresponding IDR for CVE was 0.52; 95% CI (0.25,1.1) p=0.089.

Conclusions: In non-sleepy patients with OSA, CPAP treatment reduce the incidence of CVE and hypertension, with a statistical significant decrease for those subjects that use CPAP for at least 4 hours/night.

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