Online Data Supplement

Cardiometabolic changes after Continuous Positive Airway Pressure for Obstructive Sleep Apnea: A randomised sham-controlled study

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Methods

CPAP titration

Once randomised, each participant underwent a multiple night home imitation (sham group) or auto-titrating (real group) CPAP pressure determination study. Usage of ≥4 hours for at least one night was required before the pressure determination study was accepted. Average mask leak of <0.4 litres.s⁻¹ with a mean AHI of ≤10 events/hour was required in real CPAP users before a pressure could be determined. The pressure was generally set to the 90th percentile computed by the machine that corrected most of the sleep apnea. Participants who failed to meet any criteria repeated the home-titration. Objective compliance data were downloaded from all real and sham CPAP machines after the home titration and at each visit. At week 12 all participants underwent a home auto-titrating CPAP pressure determination study and then received a real CPAP machine for an additional 3 months.

Polysomnography and sleepiness

Sleep staging and respiratory events were scored blinded to treatment allocation, using standard criteria [22,23]. Apnea hypopnea index (AHI) was calculated as the total number of apneas and hypopneas per hour of sleep. Oxygen desaturation index (ODI) was defined as the number of times oxygen desaturated by more than 3% per hour, as determined by pulse oximetry.