GW23-e1557

METABOLIC CHARACTERS IN OBSTRUCTIVE SLEEP APNOEA PATIENTS IN HYPERTENSION

doi:10.1136/heartjnl-2012-302920r.5

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Objectives Obstructive sleep apnoea syndrome (OSAS) is a well-recognised risk factor for cardiovascular disorders and is related to metabolic syndrome. The aim of this study was to investigate the characteristics of metabolism in hypertensive patients with OSAS

Methods We recruited 550 patients. The subjects underwent polysomnography. According to apnoea-hypopnoea index (AHI), the patients were divided into four groups. Ninety-four essential hypertension (EH) only patients served as control. There was 157 patients in mild, 126 in moderate and 173 in severe OSAS

+EH group. We assessed AHI, body mass index (BMI), blood pressure, fasting serum total cholesterol (TC), HDL-C, LDL-C, triglycerides (TG), glucose (G), insulin (INS), uric acid (UA) and homocysteine (Hcy).

Results Patients in OSAS+EH groups were older, had higher levels of BMI (29.9 ± 3.7 vs 27.5 ± 2.9 kg/m²), AHI, FINS (3.1 ± 0.3 vs 3.0 ± 0.4) and UA (374.1 ± 92.2 vs 342.1 ± 91.0) than those in control ($p < 0.05$). Patients in severe OSAS+EH group had lower levels of HDL-C, MSpO₂ than those in control (2.0 ± 0.1 vs 2.1 ± 0.2 , 69.9 ± 11.8 vs 85.0 ± 10.3 , $p < 0.05$). Patients in severe OSAS+EH group had higher levels of 2HPINS than those in mild and moderate group ($p < 0.05$). The levels of TG, HDL-C, MS, UA in severe OSAS+EH were higher than in EH. UA in OSAS+EH was higher than in EH. We observed significant differences in two or three measures among the four groups

Conclusions Hypertensive patients with severe OSAS have more have metabolic disturbances.