

The prevalence of obstructive sleep apnea in hypertensives.

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This study was designed to measure the prevalence of obstructive sleep apnea in untreated and treated hypertensive patients by comparing them with normotensive subjects, taking into account the possible confounding variables body mass index, age, sex, and alcohol consumption. Subjects with no known sleep disorders were recruited, had full polysomnography, and had their blood pressure assessed with a 24-h ambulatory monitor. Subjects with a mean 24-h blood pressure greater than 140/90, and receiving no treatment for, or with no history of, hypertension were classified as untreated hypertensives; those receiving antihypertension medication were classified as treated hypertensives; those with a mean 24-h blood pressure less than 140/90 and no history of hypertension were classified as normotensives. Thirty-eight percent of the 34 untreated and 38% of the 34 treated hypertensives, and 4% of the 25 normotensives had apnea-hypopnea indexes greater than 5. Logistic regression analysis showed that body mass index ($p = 0.001$), age ($p = 0.07$), sex ($p = 0.07$), treated hypertension ($p = 0.05$), and untreated hypertension ($p = 0.06$) were associated with the presence of sleep apnea, but that alcohol consumption ($p = 0.82$) was not. It is concluded that there is a relationship between sleep apnea and hypertension that, although partially explained by the confounding variables body mass index, age, and sex, persists when these are allowed for.