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Objectives To investigate the detection rate of obstructive sleep apnoea-hypopnoea syndrome (OSAHS) in hypertensive patients and the influence of obesity on it.

Methods A total of 825 in patients with hypertension were derived from a sampling of the population who visited hypertensive clinic in People's Hospital of Xinjiang Uygur Autonomous Region from April 1 to June 30 in 2009. They were asked to answer the questions concerning snoring, daytime sleepiness, or undergone physical examination. The subjects with loud snoring and daytime sleepiness, who with tubbiness neck, retrognathia, enlarged tongue, orolingual cyanosis accompany or not, were selected to undergo polysomnography for a whole night. OSAHS is defined as apnoea-hypopnoea index(AHI) not less than 5 per hour and accompanied with clinical symptoms.

Results

- 1. The detection rate of OSAHS in hypertension was 23.52% (178/825), while 34.34% (148/431) in males and 11.68% (46/394) in females respectively.
- 2. Grouping by body mass index(BMI), the detection rate were 6.6% (12/183) in subjects with normal weight, 22.22% (78/351) in overweight subjects and 36.75% (104/283) in obesity subjects with significant difference($X^2=56.736$, p<0.01). The severe OSAHS rate (16.61%) in obesity group was significantly higher than that in normal weight group (2.19%) and overweight group (7.69%) ($X^2=29.219$, p<0.01).
- 3. Grouping by waist circumference, the OSAHS rate were 7.83% (9/115) in normal group and 26.29% (184/700) in centricity obesity ($\rm X^2$ =18.623, p<0.01). The severe OSAHS rate was 2.61% (3/115) in normal group and 10.57% (74/700) in centricity obesity ($\rm X^2$ =7.32, p<0.01).
- 4. The moderate to severe OSAHS rate was increased with BMI in female patients (X^2 =5.846, p<0.05). It was increased with BMI and waist circumference in males (p<0.01).

Conclusions The detection rate of OSAHS in hypertension was higher. Obesity maybe one of the important factors for OSAHS.

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THE EFFECT OF OBESITY ON DETECTION RATE OF OBSTRUCTIVE SLEEP APNOEA-HYPOPNOEA SYNDROME IN HYPERTENSIVE PATIENTS

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