Summary

Obstructive sleep apnea syndrome (OSAS) is characterized by repetitive partial and total collapse of the upper airway that induces stressful arousals throughout sleep to reestablish breathing. The prevalence has been reported as high as 20 % in the adult population.

Hypertension was more frequently seen in patients with OSAS than in patients without OSAS and hypertension frequency increased in parallel to the severity of OSAS.

The purpose of this study is to define the relationship between the severity of obstructive sleep apnea and primary hypertension and to determine if essential hypertensive patients will be improved after treatment of OSAS by uvulopalatopharyngoplasty.

In this study, we selected 50 patients with history of primary hypertension without other co-morbidity factors, middle aged (30-50 years) of both sexes at the ENT clinic, after taking a full detailed history of symptoms of OSAS(with participation by the bed partner if possible) examination and **ENT** surgeon, representing by group Those patients undergone acoustic pharyngometry to localize the site of obstruction. They undergone measurement of blood electrocardiography, echocardiography and 24 h protein in urine. Three months after surgical treatment of patients with OSAS uvulopalatopharyngoplasty, they undergone further measurement of the same parameters. We also selected 50 young healthy adults of both sexes as a control group, representing group (B).

The total number of cured cases was 9 with a percentage of 18%. While the number of cases that improved was 23 with a percentage of 46%. On the other hand, the total number of cases that not improved was 18 with a percentage of 36%.

The results of this study indicated that the BP of the sleep apnea patients with hypertension might gradually decrease by UPPP surgery and the severity of obstructive sleep apnea can be determined objectively by using acoustic pharyngometry.