Introduction

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 ***(Hargens TA et al, 2006).***

The pathophysiological basis of OSA is periodic airway occlusion resulting in sleep and blood gas disturbance which leads to cardiovascular disease, hypertension, arrhythmia, disturbed psychosocial performance, metabolic and neuroendocrine dysfunction and increased risk of traffic accidents ***(Grunstein RR et al,2001).***

Acoustic pharyngometry is a modern diagnostic method based on physical principle of acoustic reflection. It is useful for volume analysis of oro-pharyngo-laryngeal spaces. It's a clinically useful tool for localizing the narrowed portion of the upper airway and predicting OSA ***(Gelardi M et al., 2007).***

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 ***(Bayram NA et al, 2007).***

(Grotz W et al, 2006) approved a causal relationship between sleep apnea and hypertension. Undiagnosed sleep apnea is probably the most important reason for essential hypertension and they advised that all hypertensive patients should be asked for snoring, breathing arrest and daytime sleepiness**.**

The goal of uvulopalatopharyngoplasty (UPPP) in the treatment of obstructive sleep apnea syndrome is to reduce obstruction by eliminating redundant tissue in three areas: soft palate, tonsils and pharynx ***(Friedman M et al, 2004).***