

ABSTRACT

EFFICACY OF COBLATION ASSISTED SURGERY IN OBSTRUCTIVE SLEEP APNEA WITH OBSTRUCTION AT THE RETROPALATAL LEVEL

Background and Objective: Obstructive sleep apnea syndrome is an emerging disorder in India which has contributed to the increased prevalence of various non-communicable diseases. There are many surgical procedures described in the management of OSAS of which Uvulopalatopharyngoplasty is the most commonly performed. The primary objective was to study the efficacy of coblation assisted UPPP in patients with isolated retropalatal obstruction. The effects on Polysomnography indices were also studied.

Study Design: Prospective study - Before – After analysis.

Methods: Patients diagnosed with moderate and severe obstructive sleep apnea by Polysomnography underwent Drug induced sleep endoscopy and sleep MRI to locate the level of obstruction. Only those with isolated retropalatal obstruction were selected. 25 patients underwent Uvulopalatopharyngoplasty and Polysomnography was repeated after 1 month. The parameters analysed were the Apnea Hypopnea Index, Arousal Index, Oxygen desaturation index and awakenings index. Results were also analysed using Friedman's staging system.

Results: Considering a 50 % reduction in AHI as surgical success, the efficacy of UPPP was 68% in this study. Statistically significant differences in AHI, arousal index, oxygen desaturation index and Awakenings Index were obtained in both successful and unsuccessful groups of patients.

Conclusions: Uvulopalatopharyngoplasty remains a valuable treatment option in OSA. The use of DISE and sleep MRI allows the selection of patients with isolated retropalatal obstruction who are most likely to benefit from UPPP.

Key words: Uvulopalatopharyngoplasty, Drug Induced Sleep Endoscopy, Sleep MRI, Obstructive sleep apnea, Coblation.