Effect of Coblation Assisted Uvulopalatopharyngoplasty on Sleep Disordered Breathing

Ken-ichi Hisamatsu1,2, Itsuhiro Kudou2, Tomoyuki Takane2 and Kiyoshi Makiyama2

Objectives and Methods: Twenty four severe obstructive sleep apnea syndrome (OSAS) patients, 35 sleep disordered breathing (SDB) patients with excessive daytime sleepiness, and 74 simple snorers underwent coblation-assisted uvulopalatopharyngoplasty (cobUPPP) under local anesthesia. Polysomnography (PSG) events, snoring, QOL (SF-36 v2) and excessive daytime sleepiness on the Epworth sleepiness scale (ESS) were assessed 3 months after the operation. The overall assessment criteria of the operative effectiveness on OSAS were proposed using subjective symptoms and PSG events. Informed consent was obtained in writing from all participants prior to cobUPPP.

Results: AI ($P<0.0001$), AHI ($P<0.0001$), ODI ($P<0.0001$), minimum $\text{SpO}_2$ ($P=0.028$), $\text{SpO}_2 < 90\%$ ($P=0.008$) and the arousal index ($P=0.001$) were significantly ameliorated. Excessive daytime sleepiness was ameliorated in 34/35 cases and bothering snoring was improved, based on visual analog scale scoring, in 54/55 cases. Treatment of OSAS was assessed as highly effective in 11/24, 9/24 effective and 4/24 ineffective. Transient discomfort of the pharynx was an occasional complaint.

Conclusion: cobUPPP was effective for severe OSAS without significant complications and could be very useful to manage excessive daytime sleepiness and socially unacceptable snoring.

Keywords: coblation assisted UPPP, OSAS, excessive daytime sleepiness, snoring, QOL

References


Corresponding Author Address: Ken-ichi Hisamatsu
kenhisam@jcom.home.ne.jp