Clinical Effectiveness of Coblation Inferior Turbinate Reduction

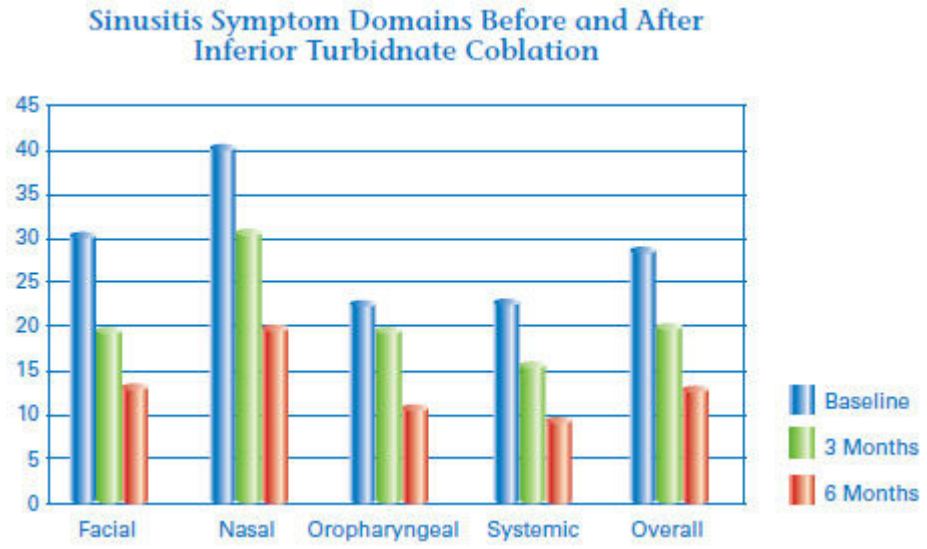
Bhattacharyya N, Kepnes LJ. Otolaryngol Head Neck Surg. 2003 Oct;129(4):365-71

OBJECTIVE: This paper determined the safety and clinical effectiveness of Coblation inferior turbinate reduction for turbinate hypertrophy.

DESIGN: Twenty six adult patients with inferior turbinate hypertrophy were treated with Coblation in the office setting. Subjective symptoms were assessed prior to treatment and at the 3 and 6-month intervals after treatment with the RSI and a short nasal symptom questionnaire.

RESULTS: Twenty four of the 26 treated patients completed the protocol. At the 3-month follow-up, statistically significant decreases in the nasal and overall symptom domains of the RSI were noted. These improvements were also significant at the 6-month follow-up. At the 3-month interval, nasal obstruction and amount of time with nasal obstruction were significantly decreased. These decreases remained statistically significant and slightly larger at 6 months.

CONCLUSION: Coblation was shown to be safe and effective when used for office-based inferior turbinate reduction. The clinical benefit persists at 6 months after the procedure.



Submucosal Bipolar Radiofrequency Thermal Ablation of Inferior Turbinates: A Long-Term Follow-Up with Subjective and Objective Assessment

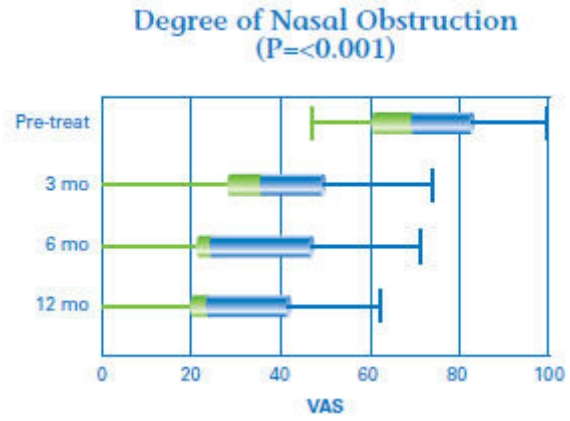
Back LJ, Hytonen ML, Malmberg HO, Ylikoski JS. Laryngoscope. 2002 Oct;112(10):1806-1812

OBJECTIVE: The authors assessed the efficacy and morbidity of Coblation inferior turbinate reduction in patients with nasal obstruction caused by turbinate hypertrophy.

DESIGN: Prospective, nonrandomized study and outpatient treatment. Twenty patients received Coblation to the inferior turbinates. Preop and post-operative nasal functions were measured using VAS scores of symptom parameters, olfactory thresholds, saccharine transit time, rhinomanometry, and acoustic rhinometry. Follow-up was conducted at 1 week, 3, 6, and 12 months.

RESULTS: The VAS scores of subjective complaints decreased, and the VAS scores of evaluation of the effectiveness increased statistically significantly in the 12-month follow-up without relapses. There were no adverse effects on nasal epithelial clearance time and olfactory functions. The acoustic rhinomtery outcomes were statistically significant 6 and 12 months after the treatments.

CONCLUSION: Use of the Coblation procedure was safe for reducing turbinate volume without altering structure of the nasal mucosa and was associated with minimal discomfort for the patient.



A Simple Surgical Technique Using the Plasma Hook for Correcting Acquired Nasopharyngeal Stenosis

Madgy D, Belenky W, Dunkley B, Shinhar S. Laryngoscope. 2005 Feb;115(2): 370-372

OBJECTIVE: The author used Coblation to treat three patients with a history of severe nasopharyngeal stenosis (NPS), demonstrating a classic clinical history consistent with problematic obstructive symptoms, including chronic mouth breathing, excessively loud snoring, and apneic episodes.

DESIGN: Three adult patients with severe NPS were treated surgically using the Coblation plasma hook.

RESULTS: No surgical complications were observed in any case. The average follow-up for all three cases was 10-12 months postoperatively. In all three cases, the obstructive symptoms and sleep apnea experienced before surgery were resolved, night-time snoring was barely audible or completely gone, and daytime sleepiness was no longer a problem. In 2 of the 3 cases, velopalatal insufficiency was present before the corrective surgery and neither of these patients has had a recurrence. The patient in the second case report was examined using fiberoptic nasopharyngoscopy at the 2-month follow-up visit at which time his nasopharynx remained wide open.

CONCLUSION: Acquired NPS is a troubling complication of otolaryngology surgery that currently requires treatment using complex surgery and often results in inconsistent outcomes. The proposed approach using Coblation technology was easy to perform, has the potential to provide a standardized technique for correcting acquired NPS, and all three pediatric cases demonstrated complete resolution of NPS symptoms.