

Uwulopalatoplastyka z użyciem lasera Nd:YAG (LAUP) u chorych z zespołem obturacyjnych bezdechów podczas snu

Nd:YAG laser assisted uvulopalatoplasty in the treatment of obstructive sleep apnea syndrome

Dariusz Babiński, Czesław Stankiewicz, Bożena Kowalska, Mikołaj Majkiewicz

Summary

Introduction. Surgical treatment of OSAS is focused on removal of narrowing that increase airway resistance in upper respiratory tract. Nd:YAG laser beam penetrates deeper into tissue than CO₂ laser followed by superior scarification ability. In this study we investigate efficacy of surgery with Nd:YAG laser assisted uvuloplasty (LAUP). **Material and methods.** The subject was 51 patients with OSAS treated in Department of Otolaryngology, Medical University of Gdansk during the 2004—2005 period. All patients underwent all-night PSG and the ESS (Epworth Sleepiness Scale) score was used to assess the daytime sleepiness. Surgery treatment was performed and all patients underwent LAUP and additionally lingual base laser vaporization, tonsillectomy and nasal surgery where needed. The postoperative control ENT examination including ESS and all-night PSG was performed after 6 months. **Results.** Success was found in 29 patients, they achieved AHI<10 and ESS<12. In another 22 patients improvement at PSG parameters and ESS score were evaluated but they were still beyond normal range. Success was obtained in 14/16 patients with preoperative AHI I degree, 10/19 AHI II, and 4/16 AHI III. Nasal surgery for enlargement of airway passage was performed more frequently (25/32) in the group with success then in the group with partial improvement (9/19). Preoperative PSG parameters were better in patients with nasal obstruction. Patients with BMI>30 succeeded rarely (10/22) in compare with patients with BMI<30 (success in 24/29). Preoperative PSG parameters were better in patients with BMI<30. **Conclusion.** LAUP with Nd:YAG laser wit additional tonsillectomy, lingual base surgery and nasal surgery were needed is successful method for surgery at light and medium stage of OSAS in nonobese patients.