

ORIGINAL ARTICLE

Comparison of radiofrequency ablation, laser and coblator techniques in reduction of tonsil size

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Abstract

Conclusions: Coblation was seen to be a much safer method for tonsil reduction surgery with less morbidity and with a higher efficacy in early and long-term follow-up. *Objective:* The objective was to compare the efficacy, morbidity and safety of three techniques for reduction of tonsil size in tonsillar hypertrophy in children. *Methods:* This was a prospective, randomized clinical study. Seventy-nine children aged 4–13 years with symptoms of tonsillar hypertrophy were included in the study. They were randomized to the coblator (group A), laser tonsillotomy (group B) or radiofrequency (group C) technique for tonsil reduction. The efficacy was evaluated by assessing tonsillar size after surgery. Morbidity was evaluated by assessing by postoperative pain and return to normal diet and activity. *Results:* Pain on the first day was significantly higher for children in group B ($p = 0.0001$). The mean values for analgesic usage and number of days until return to normal diet and normal activity were lower in group A. At 1-year postoperative follow-up, the mean tonsil size was higher in group C ($p < 0.05$). None of the children in group A, two of the children (8.3%) in group B and six of the children (21.4%) in group C need reoperation for tonsillary hypertrophy.

Keywords: *Tonsillar hypertrophy, laser tonsillectomy, tonsil coblation, radiofrequency*