

QUALITY OF LIFE AFTER KASHIMA OPERATION IN BILATERAL VOCAL FOLD PARALYSIS

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The purpose of the study was to assess the role of laser assisted posterior cordectomy in the management of patients with bilateral vocal cord paresis. The main goal of this work was to assess the quality of voice and its impact on quality of life in patients after Kashima operations. We aimed at prospective analysis of 132 consecutive patients treated by CO₂ laser posterior cordectomy, aged 38-91, 31.1% tracheotomized on admission. Methods: We looked at the number of laser glottic procedures necessary to achieve decannulation in tracheotomized patients and to achieve respiratory comfort in non-tracheotomized subjects and we evaluated the two groups for differences in patient characteristics. In tracheotomized patients we also assessed factors affecting the success of decannulation and we evaluated the impact of tracheotomy on patients' lives. The methodology included subjective voice evaluation (GRBAS), videostroboscopy, analysis of the acoustic laryngeal tone (MDVP), spectrographic analysis and voice handicap index (VHI).

Results: Decannulation was performed in 63.41% of tracheotomized patients. In terms of the number of procedures, 54% (14), 19% (5), 27% (7) tracheotomized vs. 74% (61), 24% (20), 2% (2) non-tracheotomized subjects underwent one, two, or three procedures, respectively. In the group of tracheotomized patients who were successfully decannulated the number of multiple laser assisted procedures was significantly higher than in the group of non-tracheotomized subjects with respiratory comfort after treatment ($p=0.04$). Advanced age (>66 years), comorbidities (diabetes, GERD), re-strumectomies and tracheotomy below cricoid cartilage were found to decrease the likelihood of successful decannulation. Tracheotomy significantly decreased the quality of life. **Conclusions:** Posterior cordectomy is a simple method allowing for airway improvement and decannulation in patients with bilateral vocal cord paresis. It is less effective in tracheotomized subjects with diabetes or GERD, older than 66 years old, after two or more re-strumectomies. Most patients after laser procedures accepted voice changes. Most patients were satisfied of final outcomes.