

Comprehensive rehabilitation after total laryngectomy

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ABSTRACT

Introduction: Since the first total laryngectomy by Billroth in 1873, the treatment of laryngeal cancer has improved considerably. Radiotherapy, chemo-radiation protocols, partial laryngectomies with or without laser surgery and even robot surgery have been introduced during the last decades, but preserving the larynx not always implies preserving the function. Unfortunate, despite all these advances in the conservative treatment of laryngeal cancer there will always remain a role for the total laryngectomy, so efforts to optimize the rehabilitation after this surgical procedure are of utmost importance. **Methods:** This presentation will highlight the evidence supporting comprehensive rehabilitation of not only the voice, but also pulmonary, swallowing and olfaction rehabilitation after total laryngectomy. **Results:** The larynx is more than just a 'voice box': due to its central position in the respiratory tract, its removal requires rehabilitation of all three 'systems' depending on respiratory airflow, i.e. the voice, the pulmonary system and the olfaction. Also swallowing after the total laryngectomy remains a point of attention since due to the damage caused by previous treatments to for instance the muscles of the oropharynx and upper esophageal sphincter, undisturbed deglutition is not always evident. Voice rehabilitation has been boosted by the introduction of the voice prosthesis. In 1988 a new low resistant indwelling voice prosthesis was developed in the Netherlands Cancer Institute. This prosthesis, known as the Provox, has become a worldwide accepted and widely used voice rehabilitation tool with favorable success rates of >90%. Pulmonary problems after TLE are inevitable since the upper airway is disconnected from the lower respiratory system with influence on the heating, monitoring and filtering of the inhaled air. Also the olfaction is influenced by the disconnection of the upper airway. Swallowing after TLE can be cumbersome. It's difficult to draw conclusions from a meta-analysis on swallowing disorders after TLE, mainly because of the many outcome measures, the lack of validated questionnaires for TLE patients, the lack of guidelines for swallowing investigations for TLE patients and a big heterogeneity in study designs. **Conclusion:** Rehabilitation of various functions after total laryngectomy requires a dedicated team of clinicians, speech, swallowing and physical therapists working collaboratively to improve patient's outcome.

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Drug induced sleep endoscopy directed surgery in paediatrics obstructive sleep apnoea

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ABSTRACT

Introduction: Drug Induced Sleep Endoscopy (DISE) directed surgery in children with obstructive sleep apnoea has provided an alternative diagnostic option for more comprehensive management of their condition. **Methods:** Results of a systematic review on DISE directed surgery in children will be discussed. **Results:** Seven clinical research articles were identified. Seven studies were of level III evidence: retrospective, case-control and prospective series. Altogether, there were 996 patients with male predominance of 61%. Surgical decision was changed in 295 patients (30%) following DISE. Most patients (86%) underwent a multilevel surgery based on DISE. Complications were documented in 3 studies. **Conclusions:** Analysis of the results indicated that DISE directed surgery was an effective and safe therapeutic approach to treating paediatrics obstructive sleep apnoea.