

Talk-related effort and fatigue in laryngectomized patients

Searl J, Knollhoff S. Sense of Effort and Fatigue Associated With Talking After Total Laryngectomy. *Am J Speech Lang Pathol.* 2018 Nov 21;27(4):1434-1444.

This study evaluated the extent to which adults with and without a total laryngectomy experience a sense of effort and fatigue when talking. A total of 507 subjects were included in an online survey, of which 395 were laryngectomized patients using either tracheoesophageal speech (TES; n= 222), electrolaryngeal speech (ELS; n = 132) or esophageal speech (n = 41), and 112 were healthy laryngeal speakers (LS). The laryngectomized patients reported significantly more talking-related effort and fatigue than the LS group, regardless of speaking method. Over 60% of respondents indicating that the

sense of effort caused them to talk less. Lip and tongue effort ratings were significantly higher in the ELS group compared to the other groups. ELS and TES groups reported greater shoulder/arm effort compared to ES/LS. Physical fatigue was higher in the TES group while ELS group reported higher mental fatigue. The authors conclude that alaryngeal speech is associated with effort and fatigue, causing patient to talk less. Identifying sources of effort in alaryngeal speech is worthy of further attention.

Provox Vega XtraSeal

Petersen JF, Lansaat L, van den Brekel M, Hilgers FJM. Solving periprosthetic leakage with a novel prosthetic device. *Laryngoscope.* 2018 Nov 22. [Epub ahead of print]

In this consecutive cohort study, 13 patients with periprosthetic leakage were enrolled for prospective evaluation on the efficacy, satisfaction and ease of placement of the Provox Vega XtraSeal. For voice prostheses used before placement of the new device the median device lifetime was 38 days (95% CI 1-76). With Provox Vega XtraSeal, the median device life was 68 days (95% CI 56-80), which is comparable to median device lifetimes of the Provox2 (64 days) or Provox Vega (68 days) reported in literature. Two patients still had a Provox Vega XtraSeal in situ at the last day of follow-up, with a device lifetime of 504 and 855 days respectively. Almost all cases of periprosthetic leakage



could be solved with the Provox Vega XtraSeal. Only in one patient the device had to be replaced due to periprosthetic leakage. The authors conclude that Provox Vega XtraSeal is a valuable new tool for solving periprosthetic leakage and diminishing the burden of this uncomfortable adverse event for patients and their clinicians.

Impact of communication changes on QoL

Sharpe G, Camoes Costa V, Doubé W, Sita J, McCarthy C, Carding P. Communication changes with laryngectomy and impact on quality of life: a review. *Qual Life Res.* 2018 Nov 11.

The aim of this narrative review was to explore how the communication changes after total laryngectomy (TL) may impact the quality of life (QoL) for patients. The authors identified two main themes from the review of 12 publications: changes in communication competency (immediate changes and communication option used) and adaptation to change (e.g. self-related factors and relationships with others). Participants experienced the loss of their natural voice as very distressing and believed that others may view them as odd, socially incompetent or having reduced cognitive ability. This self-perception is proposed to impact social engagement, as patients may begin to avoid social interactions and activities. Regardless of communication method used, negative changes in competency and self-ratings of QoL were reported in all studies, primarily influenced by self-perceived voice-related factors. Participants using TES (tracheo-

esophageal speech) consistently showed the highest self-reported QoL compared to other speakers. The authors conclude that a model linking communication changes to QoL may be useful in assisting researchers and clinicians in the management of laryngectomized patients.



Treatment related QoL in Latin American patients

Sanabria A, Sánchez D, Chala A, Alvarez A. Quality of life in patients with larynx cancer in Latin America: Comparison between laryngectomy and organ preservation protocols. *Ear Nose Throat J.* 2018 Mar;97(3):83-90.

The aim of this cross-sectional study was to evaluate the quality of life (QoL) outcomes for patients with advanced laryngeal tumors (stage III or stage IV) treated with laryngectomy or organ preservation protocols (chemoradiation or exclusive radiotherapy) in Latin America. Data from 21 laryngectomized patients and 14 patients treated with organ preservation protocol were collected prospectively during routine clinical visits between 2013 and 2015. Speech and activity were the most important factors that affected QoL

in both patient groups. Secondary factors mentioned among the laryngectomized patients were appearance, taste, pain, and recreation. In the organ preservation group, saliva, recreation, mood, and swallowing were reported as the most important factors. Global QoL assessments were similar in both groups, even though individual factors were ranked differently between groups. Authors conclude that important differences in specific domains need to be identified to better explain the consequences of treatment.

Preoperative factors associated with improved survival

Pujo K, Philouze P, Scalabre A, Céruse P, Poupart M, Buiet G. Salvage surgery for recurrence of laryngeal and hypopharyngeal squamous cell carcinoma: A retrospective study from 2005 to 2013. *Eur Ann Otorhinolaryngol Head Neck Dis.* 2018 Apr;135(2):111-117.

The primary objective of this study was to determine preoperative prognostic factors for overall and disease-free survival after salvage surgery for laryngeal or hypopharyngeal squamous cell carcinoma. Secondary

objectives included functional results and complication rates. Overall disease-free survival was analyzed for 52 patients with a history of radiation therapy, treated by salvage surgery for recurrence of laryngeal or hypopharyngeal squamous cell carcinoma between 2005 and 2013. Five-year overall and disease-free survival was 36.0% (range, 27.6-44.4%) and 23.5% (range, 16.0-31.0%), respectively. Neck dissection during salvage surgery was significantly associated with improved overall and disease-free survival. Survival was found to decrease with increasing tumor stage. Small (T1 and T2) tumor, laryngeal location and history of chemotherapy were also associated with better overall and disease-free survival. Authors conclude that these results will help in selecting patients for salvage surgery.



Tracheobronchitis in laryngectomized patients

Brook I. The challenges of treating tracheobronchitis in a laryngectomee due to nontypeable *Haemophilus influenzae*: a case report. *J Med Case Rep.* 2018 Aug 20;12(1):242

This case report described the occurrence of a serious bacterial tracheobronchitis due to *H. influenzae* in a laryngectomized patient. The report illustrates challenges in maintaining the patency of the airway in laryngectomized patients who suffer from lower respiratory tract infections. Respiratory tract infection may cause blocked airways due to the increased production of dry and viscous mucus that can stick to the walls of the trachea and the stoma. The benefit of wearing a heat and moisture exchanger (HME) is discussed, highlighting the fact that non-HME users have been found

to have a 3-fold higher risk for lower respiratory infections compared to HME-users. The hypothesis is that exposure to too cold air without an HME increased the compromised airway and led to the development of the infection. The author concludes that by wearing an HME at all times, maintaining adequate respiratory tract humidification and avoiding inhaling cold air, the risk of bacterial tracheobronchitis can be reduced.