



## Factors influencing Survival



Murphy CT, Galloway TJ, Handorf EA, Egleston BL, Wang LS, Mehra R, Flieder DB, Ridge JA. Survival Impact of Increasing Time to Treatment Initiation for Patients With Head and Neck Cancer in the United States. *J Clin Oncol*. 2016 Jan 10;34(2):169-78.

The interval from diagnosis to the time of treatment initiation (TTI) for head and neck cancer in the US is increasing. This study investigated the impact of the increased TTI on survival for the patients. Patients were identified using the National Cancer Data Base. A total of 51,655 patients with head and neck cancer from 2003 through 2005 were included. A TTI of 61 to 90 days and of greater than 90 days significantly predicted higher risk of death compared with a TTI of 0 to 30 days, whereas a TTI of 31 to 60 days did not. The median overall survival (OS) for TTI of 46-52 days or fewer was 71.9 months. For TTI of 53 to 67 days the mean OS was 61 months. For TTI greater than 67 days the mean OS was 46.6 months. In most recent year with available data (2011), 25% of the patients had a TTI of greater than 46 days. The authors conclude TTI independently affects survival. This study demonstrated that patients with TTI of greater than 46-52 days have increased risk of mortality that was most consistently detrimental beyond 60 days. Risk associated with increased TTI currently affects 25% of the patients with head and neck cancer in the US..



Connor KL, Pattle S, Kerr GR, Junor E. Treatment, comorbidity and survival in stage III laryngeal cancer. *Head Neck*. 2015 May;37(5):698-706. doi: 10.1002/hed.23653. Epub 2014 Sep 12. PubMed PMID: 24596316.

This study evaluates the impact of patient and treatment variables upon survival and tumor recurrence in a population of stage III laryngeal cancer. One hundred thirty-seven patients presented between 1999 and 2010 to a tertiary center were included. 24.1% received surgery with or without adjuvant therapy (SURG±Adj), 32.8% received chemoradiotherapy (CRT) and 36.5% radiotherapy (RT) alone. Overall, there was a high burden of comorbidity, with 21.9% of the patients moderate and 16.1% severe comorbidities. Thirty percent of patients treated with RT had severe comorbidity, versus 0% in SURG±Adj and 2.2% in CRT group. T3N0 tumors comprised 72.3% of the cases. RT had a significantly higher recurrence rate (46%), with surgery having the lowest rate (6.1%) and CRT having a rate of 11.2%. The 5- year cause-specific survival and overall survival were significant lower with RT (68.9% and 35.5% resp.), and highest with SURG±Adj (90.1% and 59.1% resp.). The authors conclude CRT and SURG±Adj have similar survival outcomes. However, patient selected for these treatments were generally fitter than those in the RT group. With the aging population and the advanced comorbidities that come with this, comorbidity should be considered in the interpretation of treatment outcomes..





## Lifetime of Voice prosthesis and follow-up visits



Yenigun A, Eren SB, Ozkul MH, Tugrul S, Meric A. Factors influencing the longevity and replacement frequency of Provox voice prostheses. Singapore Med J. 2015 Nov;56(11):632-6

In this study the factors that influence the device lifetime and replacement frequency of Provox voice prostheses are assessed. Patients who underwent total laryngectomy, received Provox voice prosthesis and were followed up between 1998 and 2012 were included. A total of 27 patients met the inclusion criteria. All patients were men, mean age was 63.0 (range 43-78) years, and mean follow-up duration was 60.3 (range 1-168) months. The success rate in speech rehabilitation was 85%. Among the 27 patients, 77 prostheses were used, with an average lifespan per prosthesis of 17.1 (range 1-36) months. The most frequent complication was fluid leakage through the prosthesis. A strong positive correlation was found between the lifespan of the prosthesis and the postoperative follow-up duration ( $r=0.771$ ). In this study the purpose of prosthesis placement (i.e. primary or secondary), the presence of reflux history, antifungal use and the presence of fluid leakage did not affect the device lifetime of the prosthesis. The authors believe that frequent patient control visits, proper patient selection and regular prosthesis care can help prolong the lifespan of Provox voice prosthesis.



## 15 years of voice rehabilitation in Sicily



Serra A, Di Mauro P, Spataro D, Maiolino L, Cocuzza S. Post-laryngectomy voice rehabilitation with voice prosthesis: 15 years experience of the ENT Clinic of University of Catania. Retrospective data analysis and literature review. Acta Otorhinolaryngol Ital. 2015 Dec;35(6):412-9.

This retrospective study was performed in a tertiary care center in Sicily, by examining the clinical outcomes of 15 years of experience (1998-2013). During this period 95 patients with laryngeal cancer were subjected to TEP with voice prosthesis. Variables that have influenced the success or failure of speech rehabilitation were analyzed. These variables were: age, type of tumour, type of surgery, use of prior radiation therapy, type of puncture, prosthesis used and its duration, number of replacements, complications and causes for prosthetic success or failure. Primary TEP was performed in 43 patients, without major complications. In 52 cases, who underwent secondary TEP, there were 3 major complications. The overall complication rate was 13%, with pharyngocutaneous fistula as most common complication. Postoperative radiotherapy did not affect overall rehabilitation success. In 40 patients over 70 years old the long-term success rate was 82.5%, with 78% in primary and 86% in secondary TEP. In total, the long-term success rate was 87.5%, with 84% in primary and 91% in secondary TEP. This retrospective analysis of 15 years of prosthetic rehabilitation in the Sicilian territory highlighted standard rehabilitation almost identical to those found in the recent literature in terms of intra- and postoperative complications, fistula-related pathologies and overall success.



## Pharyngocutaneous fistula after total laryngectomy



Busoni M, Deganello A, Gallo O. Pharyngocutaneous fistula following total laryngectomy: analysis of risk factors, prognosis and treatment modalities. *Acta Otorhinolaryngol Ital.* 2015 Dec;35(6):400-5.

With the evolution of non-surgical organ preservation protocols for treatment of laryngeal and hypopharyngeal squamous cell carcinomas, total laryngectomy is increasingly performed as salvage procedure. Wound complications and pharyngocutaneous fistula have become an increasing concern. The purpose of this retrospective study was to analyse potential risk factors for the development of postoperative pharyngocutaneous fistula after total laryngectomy, and to describe their management. Between January 1999 and October 2014 352 total laryngectomies were performed. The postoperative course of 86 patients was complicated by the onset of a pharyngocutaneous fistula (PCF). This group was matched and compared with a control cohort group of 86 randomly selected patients without PCF. The overall incidence of PCF was 24%, with 19% among patients receiving primary total laryngectomy (PTL), increasing to 28.6% and 30.3% for patients receiving salvage laryngectomy after radiotherapy (RT-STL) and chemoradiotherapy (CRT-STL). Analysis showed that postoperative albumin values below 3.5 g/dL, previous radiotherapy and chemoradiotherapy are significant predictors of PCF, with relative risk factors of respectively 2.47, 3.09 and 7.69. Conservative treatment is advisable for PCF developing in non- (chemo)radiated patients (93.55%). In the CRT-STL group surgical closure with regional flaps prevailed (58.82%). In the RT-STL group conservative management, adjuvant hyperbaric oxygen therapy and surgical closure were equally distributed.



Sifer R, Anicin A, Pohar MP, Zargi M, Pukl P, Soklic T, Strojan P. Pharyngocutaneous fistula: the incidence and the risk factors. *Eur Arch Otorhinolaryngol.* 2016 Mar 8. [Epub ahead of print]

Pharyngocutaneous fistula (PCF) is the most common complication following laryngectomy, with a wide range of potential risk factors. This study aimed to determine the incidence of PCF and to identify their risk factors in a cohort of patients treated with laryngectomy between 2007 and 2012. Charts of 158 patients were retrospectively reviewed. The overall PCF rate was 30.4%, with a significant difference between the primary laryngectomy group (without previous laryngeal surgery or RT/CRT), and salvage laryngectomy group, respectively 22.6% and 44.6% ( $p = 0.006$ ). The independent predictors for the fistula were history of head and neck cancer ( $p = 0.001$ ), invasion of piriform sinus ( $p = 0.020$ ) and surgical wound infection ( $p < 0.001$ ). While the first two factors cannot be modified, it is possible to decrease the rate of surgical wound infection, which could decrease the fistula rate.