

***Evaluation and Rehabilitation of Deglutition after Conservation Laryngeal Surgery***

***Thesis***

***Submitted in partial fulfilment of M.D degree in Phoniatics***

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2012***



# تقييم و تأهيل البلع بعد جراحة الحنجرة التحفظية

رسالة

توطئة للحصول على درجة الدكتوراه فى أمراض التخاطب

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## ***Abstract***

The ultimate goal of every clinician treating laryngeal cancer is the extirpation of the disease with the maintenance of voice functionality and swallowing. ***Aim:*** The aim of this work was to evaluate the outcome of deglutition after conservation laryngeal surgeries and to tailor a program for its rehabilitation in an attempt to improve the quality of life of those patients. ***Subjects and Methods:*** This prospective study was done in the period between October 2009 and October 2011, 29 patients who underwent conservation laryngeal surgeries at the ENT department of Cairo University were enrolled in this study. Pre as well as Post-operative evaluation (FEES-TBS) and rehabilitation program (3 months) were applied in the Phoniatrics unit. ***Results:*** Supracricoid partial laryngectomy with its two subdivisions (SCL-CHEP: 37.9%, SCL-CHP: 27.7%) was the most common type of conservation laryngeal surgeries. the second most commonly encountered was the Supraglottic partial laryngectomy (17.2%) while the Frontolateral vertical partial laryngectomy was found to be the second least common type carried out (10.3%), and the least common type of surgery was the unilateral cordectomies: (6.95%). The mean duration of the hospital stay among the patients in the SCL-CHEP group was 24 days, while those enrolled in the SCL-CHP group was 24.5 days, and the mean age for the ones in the ‘Others’ group was 21 days. In this study, the mean of the day of onset of oral feeding for the SCL-CHEP group was found to be 15 days, while that for the SCL-CHP group was found to be 18 days and that for the ‘Others’ group was found to be 11.5 days. In this study, the mean of the day of removal of NG tube for the SCL-CHEP group was found to be 29.3 days, while that for the SCL-CHP group was found to be 30 days and that for the ‘Others’ group was found to be 21.8

days. In this study, the tracheostomy tubes for the patients in the SCL-CHEP were removed after 7.5 days, while those in the SCL-CHP group were removed after 7.3 days, and the patients in 'others' groups had their tracheostomy tubes removed after 6.1 days. **Conclusion:** Rehabilitation program of dysphagia is essential to return to normal quality of life in patients who underwent CLS.

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## *List of Abbreviations*

<b>Abbreviation</b>	<b>Full Name</b>
<b>CLS</b>	Conservation Laryngeal Surgeries
<b>AC</b>	Anterior Commissure
<b>CT</b>	Computerized Topography
<b>SCL</b>	Supracricoid Laryngectomy
<b>CHP</b>	CricoHyoidoPexy
<b>CHEP</b>	CricoHyoidoEpiglottopexy
<b>SPL</b>	Supraglottic Partial laryngectomy
<b>CAU</b>	Crico-Arytenoid Unit
<b>VPL</b>	Vertical Partial Laryngectomy
<b>FVHL</b>	Frontolateral Vertical HemiLaryngectomy
<b>TCHP</b>	Tracheo-crico-Hyoido- Epiglottopexy
<b>PFS</b>	Piriform Sinus
<b>SLN</b>	Superior Laryngeal Nerve
<b>TL</b>	Total Laryngectomy
<b>LASER</b>	Light Amplification by Stimulated Emission of Radiation
<b>EVPL</b>	Endoscopic Vertical Partial Laryngectomy
<b>RT</b>	Radiotherapy
<b>UES</b>	Upper Esophageal Sphincter
<b>PES</b>	Pharyngo-Esophageal Sphincter
<b>APOff</b>	Apnea Off set
<b>GERD</b>	Gastro-Esophageal Reflux Disease
<b>ENT</b>	Ear-Nose & Throat
<b>FEES</b>	Flexible Endoscopic Evaluation of Swallowing
<b>VFSS</b>	Video-Fluoroscopic Studies
<b>MBS</b>	Modified Barium Swallow
<b>HRCT</b>	High resolution Computerized Topography
<b>QOL</b>	Quality of Life
<b>ASHA</b>	American Speech Language and Hearing Association
<b>FMRI</b>	Functional Magnetic Resonance Imaging
<b>AHRQ</b>	Agency for Health Care Research & Quality
<b>AHCPR</b>	Agency for Health Care Policy & Research
<b>ROM</b>	Range of Motion
<b>FDA</b>	Food and Drug Administration
<b>NIH-SSS</b>	National Institute of Health-Swallow Scale Score

<b>PDMS</b>	Poly-Di-Methyl-Siloxane
<b>ACCP</b>	American College of Chest Pathology
<b>PEG</b>	Percutaneous Endoscopic Gastrostomy
<b>TNM</b>	Tumour- Node- Metastases
<b>LSVT</b>	Lee Silverman Voice Therapy
<b>NG</b>	Nasogastric Tube
<b>CP</b>	CricoPharyngeus
<b>TBS</b>	Timed Barium Swallow

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