



Swallowing Problems after Thyroidectomy

Thesis

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By

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List of Contents

Title	Page No.
List of Tables	i
List of Figures.....	iv
List of Abbreviations	viii
Introduction	- 1 -
Aim of the Work.....	15
Review of Literature	
▪ Anatomy of the Pharynx.....	16
▪ Physiology of Swallowing.....	40
▪ Evaluation of Swallowing or Dysphagia	53
▪ Dysphagia.....	92
Subjects and Methods	105
Results	118
Discussion	146
Summary	160
Conclusion.....	165
References.....	166
Arabic Summary	

List of Tables

Table No.	Title	Page No.
Table (1):	Origin, insertion, nerve supply and action of suprahyoid and infrahyoid muscles as.....	26
Table (2):	The location of the residue and the site of the breakdown	81
Table (3):	Descriptive data of age, sex and type of operation	118
Table (4):	Descriptive data of early post-operative questionnaire.....	120
Table (5):	Early dysphagia by questionnaire	120
Table (6):	Descriptive data of late post-operative questionnaire	121
Table (7):	Late Dysphagia by questionnaire	121
Table (8):	Comparison between early and late post-operative dysphagia questionnaire items	122
Table (9):	Percentage of early and late dysphasia by questionnaire in Group I.	123
Table (10):	Percentage of early and late dysphasia by questionnaire in Group II.....	125
Table (11):	Description of pre-operative FEES clinical data among cases.....	130
Table (12):	Description of early post-operative clinical data among cases.....	131
Table (13):	Description of late post-operative clinical data among cases.....	132
Table (14):	Descriptive data of FEES post-operative early and late dysphagia	133
Table (15):	Comparison between early post-operative normal vocal fold mobility (NVFM)Group I and abnormal vocal fold motility (AVFM) Group II cases as regards personal and medical data.....	134

List of Tables cont...

Table No.	Title	Page No.
Table (16):	Comparison between late post-operative normal vocal fold mobility (NVFM) (Group I) and abnormal vocal fold motility (AVFM) (Group II) cases as regards personal and medical data	135
Table (17):	Comparison between post-operative normal vocal fold mobility (NVFM) (Group I) and abnormal vocal fold mobility (AVFM) cases (Group II) as regards early dysphagia by Questionnaire.....	136
Table (18):	Comparison between late post-operative normal vocal fold mobility (NVFM)(Group I) and abnormal vocal fold motility (AVFM) cases(Group II) as regards late dysphagia by Questionnaire.....	137
Table (19):	Comparison between early post-operative normal vocal fold mobility (NVFM) (Group I) and abnormal vocal fold motility (AVFM)(Group II) as regards early swallowing results	138
Table (20):	Comparison between post-operative normal vocal fold mobility (NVFM) (Group I) and abnormal vocal fold mobility (AVFM) cases (Group II) as regards early dysphagia by FEES	139
Table (21):	Comparison between late post-operative normal vocal fold mobility (NVFM)(Group I) and abnormal vocal fold motility (AVFM) cases (Group II) as regards late swallowing results	140

List of Tables cont...

Table No.	Title	Page No.
Table (22):	Comparison between late post-operative normal vocal fold mobility (NVFM)(Group I) and abnormal vocal fold motility (AVFM) cases (Group II) as regards late dysphagia by FEES	141
Table (23):	Comparison between early and late post-operative vocal fold mobility and swallowing characteristics	143
Table (24):	Agreement between FEES and dysphagia questionnaire as regards diagnosis of early post-operative dysphagia	144
Table (25):	Agreement between FEES and dysphagia questionnaire as regards diagnosis of late post-operative dysphagia.....	145
Table (26):	Comparison between MNG cases and cancer thyroid cases as regard early and late dysphagia	145

List of Figures

Fig. No.	Title	Page No.
Figure (1):	Origin and insertion of constrictor muscles	18
Figure (2):	Parts of inferior constrictor muscle	18
Figure (3):	Cricopharyngeus muscle	19
Figure (4):	Longitudinal muscles of pharynx	20
Figure (5):	Ant, Sagittal and post view of larynx	22
Figure (6):	Intrinsic laryngeal muscles	22
Figure (7):	Transverse arytenoid muscle	23
Figure (8):	Inside and posterior view of larynx	23
Figure (9):	Suprahyoid muscles (Superior and inferior views)	24
Figure (10):	Infrahyoid muscles	25
Figure (11):	Oesophagus	28
Figure (12):	Anatomy of thyroid gland	31
Figure (13):	Pre-tracheal fascia axial view	31
Figure (14):	Pre-tracheal fascia sagittal view	32
Figure (15):	Blood supply of thyroid gland	34
Figure (16):	Superior thyroid artery	35
Figure (17):	Inferior thyroid artery	35
Figure (18):	Superior laryngeal nerve	37
Figure (19):	Recurrent laryngeal nerves	38
Figure (20):	Galien's anastomosis	38
Figure (21):	Platysma muscle	39
Figure (22):	Swallowing phases	40
Figure (23):	Oral transport phase	43
Figure (24):	Pharyngeal phase	46
Figure (25):	Esophageal phase	47
Figure (26):	Gag reflex	50
Figure (27):	Cough reflex	52
Figure (28):	Eating Assessment Tool (EAT-10)	56
Figure (29):	Arabic Version of the EAT-10 (A-EAT-10)	57
Figure (30):	Videofluoroscopy system	61

List of Figures cont...

Fig. No.	Title	Page No.
Figure (31):	AP View VESS.....	62
Figure (32):	Lat view VESS	63
Figure (33):	Videofluorography AP-view, patient with dysmorphic epiglottis with asymmetrical tilting.....	64
Figure (34):	Videofluorography LL-view, patient with transient sub-epiglottic penetration and subsequent aspiration with persistence of contrast media in the anterior wall of the trachea, in the absence of coughing.....	65
Figure (35):	Videofluorography LL-view of laryngeal penetration (A) and aspiration (B) in dysphagic individuals swallowing liquid barium	66
Figure (36):	FEES.....	69
Figure (37):	Premature spillage of bolus (arrows)	77
Figure (38):	The vallecula images with the greatest inter-rater agreement for each residue level.....	79
Figure (39):	The pyriform sinus images with the greatest inter-rater agreement for each residue level.....	79
Figure (40):	Esophagogastroduodenoscopy.....	85
Figure (41):	Impedance–pH monitoring (Hawkey, 2012).	88
Figure (42):	MII-PH.....	89
Figure (43):	Esophageal manometry	91
Figure (44):	Arabic Version of the EAT-10.....	108
Figure (45):	Karl-Storz flexible nasolaryngoscope used for FEES in the current study.	109
Figure (46):	FEES recording system used to record examination for further analysis.....	110

List of Figures cont...

Fig. No.	Title	Page No.
Figure (47):	The view typically achieved with the “pre-swallow position” (home position) allows for visualization of portions of the base of tongue, laryngeal structures and subglottic space.	111
Figure (48):	The view achieved with the “post-swallow position” (close view) (bird's eye view) allows for closer inspection of the subglottic space.	112
Figure (49):	Different food consistencies mixed with green dye and tools used during the FEES examination protocol.	113
Figure (50):	FEES scoring sheet used by ASUH clinic of swallowing	115
Figure (51):	Descriptive data of postoperative type of operation.....	119
Figure (52):	Percentage of early and late dysphasia by questionnaire in Group I.....	124
Figure (53):	Percentage of early and late dysphasia by questionnaire in Group II.	125
Figure (54):	Percentage of early post-operative vocal folds mobility abnormality (Group II) in comparison to normal (Group I)	126
Figure (55):	Percentage of late post-operative vocal fold mobility abnormality (Group II) in comparison to normal (Group I)	127
Figure (56):	Spillage (delayed triggering)	129
Figure (57):	Residue	129
Figure (58):	Penetration	129
Figure (59):	Percentage of early postoperative	131
Figure (60):	Percentage of late postoperative.....	132

List of Figures cont...

Fig. No.	Title	Page No.
Figure (61):	Comparison between post-operative normal vocal fold mobility (NVFM) (Group I) and abnormal vocal fold mobility (AVFM) cases (Group II) as regards early dysphagia by Questionnaire.....	136
Figure (62):	Comparison between late post-operative normal vocal fold mobility (NVFM) (Group I) and abnormal vocal fold motility (AVFM) cases (Group II) as regards late dysphagia by Questionnaire.....	137
Figure (63):	Comparison between mobile and fixed regarding post- operative vocal cord.	142
Figure (64):	Comparison between early and late post-operative swallowing assessment by FEES.....	143

List of Abbreviations

Abb.	Full term
<i>A- EAT-10</i>	<i>Arabic version of Eating Assessment Tool-10</i>
<i>ASHA</i>	<i>American Speech-Language - Hearing Association</i>
<i>AVFM</i>	<i>Abnormal vocal fold mobility</i>
<i>CP</i>	<i>Cricopharyngeus muscle</i>
<i>EAT-10</i>	<i>Eating Assessment Tool-10</i>
<i>EGDS</i>	<i>Esophagogastroduodenoscopy</i>
<i>EPO</i>	<i>Early postoperative</i>
<i>FEES</i>	<i>Fiberoptic Endoscopic Evaluation of Swallowing</i>
<i>HREM</i>	<i>High resolution esophageal manometry systems</i>
<i>HS</i>	<i>Highly significant</i>
<i>IC</i>	<i>Inferior constrictor muscle</i>
<i>LES</i>	<i>Lower esophageal sphincter</i>
<i>LPO</i>	<i>Late postoperative</i>
<i>MII-pH</i>	<i>Multichannel intraluminal impedance-pH</i>
<i>NS</i>	<i>Non-significant</i>
<i>NVFM</i>	<i>Normal vocal fold mobility</i>
<i>O-FEES</i>	<i>Oral Fiberoptic Endoscopic Evaluation of Swallowing</i>
<i>PCA</i>	<i>Posterior cricoarytenoid activity</i>
<i>RLN</i>	<i>Recurrent laryngeal nerve</i>
<i>S</i>	<i>Significant</i>

List of Abbreviations cont...

Abb.	Full term
<i>SIS</i>	<i>Swallowing Impairment Score</i>
<i>SLN</i>	<i>Superior laryngeal nerve</i>
<i>SOAL</i>	<i>Swallowing outcome after laryngectomy questionnaire total</i>
<i>SSA</i>	<i>Standardized Swallowing Assessment</i>
<i>SSQ</i>	<i>Sydney Swallow Questionnaire</i>
<i>TNE</i>	<i>Trans-nasal esophagoscopy</i>
<i>TVFs</i>	<i>True vocal folds</i>
<i>UES</i>	<i>Upper esophageal sphincter</i>
<i>VESS</i>	<i>Videoendoscopic swallowing study</i>
<i>VFSS</i>	<i>Videofluoroscopic swallowing study</i>
<i>VIS</i>	<i>Voice Impairment Score</i>

ABSTRACT

ABSTRACT

Background: Dysphagia is the medical term that is used to describe the difficulty of swallowing and the feeling of difficulty in passage of solids or semisolids or liquids from the mouth to the stomach. **Objectives:** The aim of this work is to evaluate swallowing after different types of thyroidectomy operations. **Subjects and Methods:** This study is a prospective, randomized trial on evaluation of swallowing after different types of thyroidectomy operations. This thesis study was conducted on 100 patients underwent different types of thyroidectomy operations, recruited from otorhinolaryngology and general surgery outpatient clinic Ain Shams university hospital from April 2018 to September 2019. An informed consent was obtained from each patient or their legal guardians before enrolment in the study. Each patient assessed by A EAT-10 Questionnaire and FEES(functional endoscopic evaluation of swallowing) both (pre-operative, early post-operative(EPO) and late post-operative(LPO)). **Results:** The study include 100 patient and mean age of study cases was 37.4 ± 10.1 ; females represented 94% of cases. Total thyroidectomy was performed in 94% of cases. Among our cases, we found that Dysphagia was scored 0% at pre-operative questionnaire, 82% at early post-operative questionnaire and 36% at late post-operative questionnaire. Two groups were compared by FEES: Group I with normal vocal fold mobility(NVFM) and Group II with abnormal vocal fold mobility(AVFM) (unilateral fixed vocal fold). Group I included 89 patients, Forty two percent of them had early Dysphagia, while only 22% of them had late dysphagia. As regard swallowing; we found that early post-operative delayed triggering, early post-operative aspiration; early post-operative penetration and early post-operative residue were 12.4%, 0%, 0% and 42.7% respectively. While late post-operative examination revealed that there was improvement of 6 patients and the number of patients of this group became 95 who had normal vocal fold mobility. And the swallowing evaluation revealed that as regard late post-operative delayed triggering, late post-operative aspiration; late post-operative penetration and late post-operative residue were 11.6%, 0%, 0% and 6.3% had respectively. Group II included

11 patients at the early postoperative evaluation, all of them had early Dysphagia (100%). As regard the swallowing evaluation, we found that early post-operative delayed triggering, early post-operative aspiration early post-operative penetration and early post-operative residue were 100%, 54.5%, 100% and 45.5% respectively. But the late post-operative evaluation showed that 45% only of the cases of this group (5 cases) still had abnormal vocal fold mobility (unilateral fixed vocal fold). And as regard swallowing; we found late post-operative delayed triggering, late post-operative aspiration, late post-operative penetration and late post-residue were 100%, 100%, 80% and 0% respectively.

Conclusion: Dysphagia occurs in patients after thyroidectomy operations (regardless of larynx mobility alteration) and characterized by delayed triggering and stasis of food in the oro and hypopharynx, which is also noticed in LPO, though more frequently in EPO.

Keywords: Swallowing Problems, Thyroidectomy