Swallowing Problems after Thyroidectomy

Thesis

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List of Abbreviations

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

List of Abbreviations **cont...**

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

ABSTRACT

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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

11patients 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