



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكرو فيلم

بسم الله الرحمن الرحيم



MONA MAGHRABY



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شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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A comparative study between the use of Resonance Tube Voice Therapy and Smith-Accent Voice Therapy in rehabilitation of hyperfunctional dysphonia

Thesis

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا

سببنا نك لا علم لنا
إلا ما علمتنا إنك أنت
العليم العظيم

صدق الله العظيم

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List of Abbreviations

Abb.	Full term
AM.....	Accent Method
A-P	anterior to posterior
APA.....	Auditory Perceptual Assessment
BRAT.....	behavior readjustment technique
CONSORT	Consolidated Standards of Reporting Trials
COVID 19.....	Coronavirus disease 2019
CQ.....	Contact quotient
CT	Computerized tomography
CT	Cricothyroid
EGG	Electroglottography
FVF	False vocal fold
IL	injection laryngoplasty
MADR.....	Maximum area declination rate
MAPLs.....	Minimal Associated Pathological Lesions
MFDR.....	Maximum flow declination rate
MLS.....	Micro-laryngeal surgery
MRI.....	Magnetic resonance imaging
MTD	Muscle tension dysphonia
OQ.....	Open quotient
QOL.....	Quality-of-life
RCT.....	Randomized controlled trial
RTVT	Resonance Tube voice therapy
SA	Smith-Accent
SOVTE	Semiocluded vocal tract exercises
SPL	Sound pressure level
SPR.....	singing power ratio
TA.....	Thyroarytenoid

List of Abbreviations Cont...

Abb.	Full term
TPA	Tube phonation with the distal end in air
UVFP	Unilateral vocal fold paralysis
VDQOL.....	Voice disorder quality of life
VFE	Vocal function exercises
VHI	Voice Handicap Index
VLP	Vertical laryngeal position
WRT	Water resistance therapy

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INTRODUCTION

Voice is the complex, dynamic product of vocal fold vibration that allows us to vocalize (i.e. make sound) and verbalize (i.e. produce language through speech) (*Justice, 2006*). The basic task of the voice is to act as a carrier wave of speech communication (*Vilkman, 2000*). Control of voice is an essential component in the individual's ability to adjust the social situation, to make good contact and maintain equilibrium in relation to the audience. It serves as the melody of speech and provides expression, feeling, intent and mood of the articulated thoughts (*Greene and Mathieson, 1989*).

Voice disorders are characterized by abnormalities in pitch, loudness, and/or quality of the voice that can limit the effectiveness of oral communication (*Ramig and Verdolini, 1998; MacKenzie et al., 2001 and Simberg et al., 2006*) and cannot fulfill the speaker's social and occupational requirements (*Aronson, 1985; Stemple, et al., 1995 and Sataloff and Abaza, 2000*). Therefore, dysphonia is defined as any "deviation in the vocal quality, pitch, loudness, and vocal effort that affect communication or produces a negative impact on the voice-related quality of life". In other words, it is an individual's reduction of the self-perceived physical, emotional, social or economic status due to a voice problem (*Schwartz et al., 2009*).

Voice disorders can be classified into: (*Kotby et al., 2016*)

I: Organic voice disorders: These are voice disorders where there are detectable morphological changes in the vocal apparatus, usually the vocal folds, e.g:

- 1) Congenital: congenital laryngeal web, sulcus glottides, larygomalacia, posterior laryngeal cleft and congenital vocal fold paralysis.
- 2) Traumatic (glottic trauma):
 - Mechanical trauma [blunt trauma with possible fracture of laryngeal cartilages and affection of the joints, sharp trauma “cut throat”, surgical complications of phonosurgery, endotracheal intubation].
 - Physical trauma [thermal burns, irradiation].
 - Chemical trauma [caustics, fumes, acid from gastroesophageal reflux].
 - Acute or chronic vocal trauma.
 - Tussive trauma.
- 3) Inflammatory [Acute/ chronic laryngitis].
- 4) Neoplastic; Dysplastic
- 5) Neurological [spasmodic dysphonia].
- 6) Endocrinopathies [thyroid gland, pituitary gland, suprarenal gland, gonad disturbances].
- 7) Status Post-laryngectomy.