COMPARATIVE STUDY BETWEEN OPEN SURGERY, ENDOSCOPIC SURGERY AND LASER ARYTENOIDECTOMY IN TREATMENT OF BILATERAL VOCAL FOLD PARALYSIS

Essay Submitted for the Partial Fulfillment of the Master Degree in Otorhinolaryngology

By

Wael Shehata Mohamed Ahmed

M.B., B.Ch.

616.2.2
W. Sh

Supervised by

Prof. Dr. Fouad Abbas Ismail

Professor of Otorhinolaryngology
Faculty of Medicine-Ain Shams University

Prof. Dr. Hesham Yehia El-Sherbiny

Professor of Otorhinolaryngology
Faculty of Medicine-Ain Shams University

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Introduction

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Introduction

The treatment of patients with bilateral vocal fold paralysis presents a challenge to the otolaryngologist-head and neck surgeon. Many techniques have been proposed to manage individuals with bilateral vocal fold paralysis in an attempt to improve the patient's airway insufficiency.

Arytenoidectomy is currently the most reliable method of treating patients with bilateral vocal fold paralysis *(Ossoff, 1990).*

Corrective surgery of the paralyzed or corrected fixed folds was carried initially using external surgical approaches.

Endoscopic arytenoidectomy was described by *Thornell (1948),* he reported an overall success rate 98 per cent *(El-Chazly, 1991).*

Although both endoscopic and external approaches has been described, the endoscopic technique is more described because it requires no incision and allows the immediate assessment of airway size.

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However, this technique has been historically difficult for many surgeons to master because of intra-operative bleeding and oedema.

Application of laser for management of patients with bilateral vocal fold paralysis by *Kirchner (1979-1982)* and *Lim (1985)* has facilitated certain refinements and afforded significant reproducibility to the technique of endoscopic arytenoidectomy *(Ossoff, 1990)*.

Laser has allowed the otolaryngologist-head and neck surgeon to perform precision operations through the relatively narrow field of the microlaryngoscope without the need for tissue manipulation and also increased homeostasis and decreased intraoperative and post operative oedema *(Eckle, 1994)*.

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