



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم



MONA MAGHRABY



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكرو فيلم



شبكة المعلومات الجامعية التوثيق الإلكتروني والميكرو فيلم



MONA MAGHRABY



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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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MONA MAGHRABY

A Prospective comparative Study of Vermilion repair by Modified V- advancement Vermilion Flap in Unilateral Cleft Lip Patients.

Thesis

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By

Yara Salah Elsayed Mohammed

(M.B.B.Ch, Ain Shams University)

Supervised by

Prof. Dr./ Amr Abdelwahab Reda Mabrouk.

Professor of Plastic, burn and maxillofacial Surgery,

Faculty of Medicine –Ain Shams University

Ass. Prof. Dr. / Iman Mohammed Mohammed Alliethy

Assistant Professor of Plastic, burn and maxillofacial Surgery,

Faculty of Medicine –Ain Shams University

Faculty of Medicine

Ain Shams University

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LIST OF ABBREVIATIONS

ABBREVIATIONS	
CDC	Center of Disease Control and Prevention.
CLP	Cleft Lip with or without Cleft Palate.
CNV2	Maxillary Division of Trigeminal Nerve.
CNV3	Mandibular Division of Trigeminal Nerve.
COM	Chronic Otitis Media.
CP	Cleft palate.
CPO	Cleft palate only.
D	Deep Fibers.
DL	Deciliter.
ECHO	Echocardiography.
ENT	Ear, Nose and throat.
G	Gram.
Ib	Pound.
IQR	Inter quartile range.
IRF6	Interferon Regulatory Factor 6.
KG	Kilogram.
LSF	Lower Superficial Fibers.
NAM	Nasoalveolar Molding.
PSS	Postsurgical Scoring.
SLP	Speech Language Pathology.
USF	Upper Superficial Fibers
VPD	Velopharyngeal Dysfunction.
WHO	World Health Organization.

Introduction

Cleft lip and palate is the second most common congenital birth defect worldwide (**Parker et al., 2010**). Oral clefts in any form occur in about one in every 700 live births (**World Health Organization [WHO], 2001**). Cleft lip is consistently more common in males at a 2:1 ratio, in contrast to cleft palate which has a similar ratio in favor of females (**James, 2000**).

Cleft lip is an immediately recognizable disruption of normal facial structure (**Desmed et al., 2015**). Beside the facial features, patients with cleft lip have serious functional problems with suckling and speaking (**Lithovius et al., 2015**). It also has significant psychological and socioeconomic effects on patients' quality of life and requires a multidisciplinary team approach to be managed properly (**Wehby et al., 2012**).

Cleft lip can be classified into microform, a notch or groove in the soft tissues of the lip, and incomplete with a dehiscence of the orbicularis oris with variable involvement of the skin, or complete cleft which extends through the whole length of the lip and into the nasal sill, leading to abnormal insertion of the orbicularis oris onto the ala of nose and columella (**Dixon et al., 2011**).

Surgical repair of cleft lip is preferred to be done in the first two to three months after birth (**Chow et al., 2016**). The goals of repair are recreation of lip continuity, establishing symmetry of the Cupid's bow and the ala in a manner that places scars in less discernable area. Also, Recreation of the orbicularis muscle to circumferentially surround the opening of the oral cavity is important for long-lasting cosmetic outcomes and lip and mouth function and for the symmetry of vermilion (**Mossey et al., 2009**).

Different surgical techniques have been described. They are divided into three categories; straight line closure which represents a simple technique but has the disadvantage of creating a vertical scar contracture, leading to notching of the lip (**Kirschner, 2000**). The group of Triangular flaps can avoid the scar being contracted because of its zigzag nature, they have also the advantages of closing wide clefts, short learning curve; however, they violated the philtrum (**Sykes & Tollefson , 2005**). The last group is rotational advancement flap technique which, inspite of being flexible, has vertical scar at the philtrum which causes shortening in the lip and notch at the vermilion (**Seibert et al., 1993**).

Several techniques of vermilion repair have been described before (**Mulliken et al., 1993**). One of them is the vermilion triangular flap that makes up for the insufficient vermilion height on the cleft side and can improve the texture of the vermilion and reduce the exposure of the mucosa; however, it frequently causes other deformities, such as bulking of the red lip free margin and unification of the labial tubercle and lateral segment (**Powar et al., 2013**).

Here we study the modified v-advancement vermilion flap combined with Tennison technique for cleft lip repair that aims at providing a better aesthetic outcome with dry vermillion symmetry and red line alignment.

Aim of the Work

The aim of this work is to assess modified v-advancement vermillion flap combined with Tennison technique for management of vermillion repair in unilateral cleft lip regarding the aesthetic outcome in comparison to repair of cleft lip by Tennison technique alone.