بسم الله الرحمن الرحيم

MONA MAGHRABY

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

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شبكة المعلومات الجامعية

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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

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MONA MAGHRABY

Evaluation of the Efficacy and Safety of Different Dilutions of Mesobotox in Mid and/ or Lower Face Rejuvenation: Interventional Study

Thesis

For Partial Fulfillment of Master Degree
in **Dermatology, Venereology and Andrology**

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List of Contents

List of Tables

Table No.	Title	Page No.

List of Tables (Cont...)

List of Tables (Cont...)

List of Figures

List of Figures (Cont...)

List of Abbreviations

Abb.	Full term
AHAs	*Alpha-hydroxyl acids*
BTX	*Botulinum toxin*
C.Bot	*Clostridium botulinum*
CGRP	*Calcitonin gene-related peptide*
CNS	*Central nervous system*
CO_2	*Carbon dioxide*
CoQ10	*Coenzyme Q10*
Cu	*Copper*
DNA	*Deoxyribonucleic acid*
FDA	*Food and Drug Administration*
GAIS	*Global aesthetic improvement scale*
GHK-Cu	*Glycyl L histidyl-L lysine Cu*
HA	*Hyaluronic acid*
HIFU	*High-intensity focused ultrasound*
HS	*Hidradenitis suppurativa*
IPL	*Intense pulsed light*
MicroBoNT-A	*Microbotulinum Toxin A*
MRI	*Magnetic resonance imaging*
MSCs	*Mesenchymal stem cells*
N	*Number*
ORL	*Orbicular retaining ligament*
PHN	*Postherpetic neuralgia*
PLA	*Poly-L-lactic acid*
PMMA	*Polymethylmethacrylate*
PRP	*Platelet-rich plasma*
SD	*Standard Deviation*
SMAS	*Superficial musculoaponeurotic system*
SPSS	*Statistical package for social science*
TCA	*Trichloroacetic acid*

List of Abbreviations Cont...

Abb.	Full term
TEWL	*Transepidermal water loss*
U	*Unit*
UVA	*Ultraviolet A*
UVB	*Ultraviolet B*
UVC	*Ultraviolet C*
VEGF	*Vascular endothelial growth factor*
Y	*Years*

INTRODUCTION

Facial ageing is a gradual process which could be due to intrinsic and extrinsic causes. It ultimately results in the appearance of gravity-induced tissue ptosis, wrinkles, epidermal and dermal atrophy, dryness, senile lentigo, flushing, telangiectasia, and enlarged pores ***(Vashi et al., 2016).***

The first signs of the aging face are visible in the third decade, when eye-brows start to descend as a result of increased skin laxity, gravitational force, and repeated contractions of the muscles in periorbital region ***(Krutmann et al., 2017).***

Progression of the ageing process in the following decades produces additional changes in facial soft tissues and bony landmarks, leading to alterations in facial proportions ***(Ramos-e- Silva et al., 2013).***

The upper third of the face of the mature person reveals the enlargement of the frontal bone, increased protrusion of the glabella, resorption of superomedial and inferolateral orbital rims and lateral translation of the orbits. Repeated contractions of the frontal muscles contribute to the development of dynamic and static rhytides on the forehead and glabella ***(Gerth, 2015)***.