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شبكة المعلومات الجامعية

التوثيق الالكتروني والميكرو فيلم

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التوثيق الالكتروني والميكرو فيلم

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بالرسالة صفحات
لم ترد بالأصل

**Non-ablative Fractional Photothermolysis
laser versus Percutaneous Collagen
Induction Therapy in treatment of Acne Scars**

Thesis

Submitted for Partial Fulfillment of M.Sc. Degree in Dermatology,
Venereology and Andrology

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا
إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ

صدق الله العظيم

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CONTENTS

	<i>Page</i>
Acknowledgements	II
Abstract	III
List of abbreviations	IV
List of tables	VI
List of figures	VIII
INTRODUCTION AND AIM OF WORK	1
REVIEW OF LITERATURE:	
• CHAPTER I: Acne Vulgaris	6
• CHAPTER II: Fractional Resurfacing	38
• CHAPTER III: Percutaneous Collagen Induction in the form of Dermalroller	60
PATIENTS AND METHODS	71
RESULTS	78
DISCUSSION	111
SUMMARY	116
REFERENCES	118
ARABIC SUMMARY	

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ABSTRACT

Background: Facial acne scarring is treated with multiple procedures with varying degrees of improvement. Non-ablative rejuvenation with non ablative fractional laser has been reported to provide significant improvement in treating atrophic acne scars. Percutaneous collagen induction therapy in the form of Dermalroller has also been reported as an effective procedure for treating atrophic acne scarring.

Objective: To compare the efficacy of non-ablative fractional laser and Percutaneous collagen induction therapy in the form of Dermalroller as different therapeutic modalities in treatment of atrophic acne scarring.

Patients and Methods: Twenty patients with bilateral post acne scars on the face, recruited from Kasr Al Ainy Hospital outpatient clinic, were enrolled in this study.

Results: Both of non-ablative fractional laser and Percutaneous collagen induction therapy in the form of Dermalroller are effective modalities in treating atrophic acne scars, both have comparably close results.

Key words: acne scars, non ablative fractional laser and Dermalroller.

Mm	Millimeter
MMPs	Metalloproteinases
MTZ	Microscopic thermal treatment zone
Nd:YAG	Neodymium: yttrium-aluminum-garnet.
NF- κ B cells	Nuclear factor kappa-light chain enhancer of activated B
Nm	Nanometer (nm = 10^{-9} meter).
NS patients	Patients who were not prone to develop scarring.
NSAIDs	Nonsteroidal anti-inflammatory drugs.
<i>P. acnes</i>	<i>Propionibacterium acnes</i> .
<i>P. parvum</i>	<i>Propionibacterium parvum</i> .
PCI	Percutaneous collagen induction.
PDL	Pulsed dye laser.
RF	Radiofrequency.
RSTLs	Relaxed skin tension lines.
S patients	Patients who were prone to develop scarring.
<i>S. aureus</i>	<i>Staphylococcus aureus</i> .
SOX-9	Sex determining gene.
TCA	Trichloroacetic acid.
TEWL	Transepidermal water loss
TIMP	Tissue inhibitors of metalloproteinases.
TLRs	Toll-like receptors.
TNF-	Tumor necrosis factor.
TNFR	Tumor necrosis factor receptor.
US FDA	United state food and drug administration.
W/V	Weight-in-volume.
ZTD	Zone of thermal damage.
ZTM	Zone of thermal modification.
Mm	Micrometer ($\mu\text{m} = 10^{-6}$ meter).
	receptor and a maker for immune stimulation.)
$^{\circ}\text{C}$	Degree Celsius (degree Centigrade).

List of Abbreviations

BP	Benzoyl peroxide.
CD45RA+	Naive T-cell subset in infants.
CD45RO+	Activated/memory T-cell subset in adults.
Cm	Centimeter.
CO ₂	Carbon-dioxide.
CROSS	Chemical Reconstruction Of Skin Scars.
ECCA	echelle d'évaluation clinique des cicatrices d'acne.
ECLA	echelle d'évaluation Clinique des lésions d'acne.
Er:glass	Erbium: glass.
Er:YAG	Erbium: yttrium-aluminum-garnet.
Fig.	Figure.
FP	Fractional photothermolysis.
FR	Fractional resurfacing
H/E	Hematoxylin/ eosin stain.
HLA-DR	Human leukocyte antigen. (DR: a molecule of cell surface
HSPs	Heat shock proteins.
IGF-	Insulin-like Growth Factor.
IL-	Interleukin.
IL-1B	Interlukin-1 Beta
IL-R	Interleukin receptor.
INF	Interferon.
IPL	Intense pulsed light.
J	Joules
JNK C-	Jun-N-terminal kinase.
KTP	Potassium-titanyl-phosphate.
MAPK	Mitogen-activated protein kinase
MEND	Microscopic epidermal necrotic debris
MKP-1	MAPK phosphatase-1.

List of Tables

Table No.	Title	Page
1.	Currently available acne scarring-severity scales.	18
2.	Qualitative global acne scarring grades and examples of postacne scarring.	21
3.	Qualitative global acne scarring classification by area of involvement and major scar type.	22
4.	Qualitative global acne scarring grades and likely treatment options.	23
5.	Topical agents for acne.	23
6.	Acne therapy.	24
7.	Patients of acne scars according to qualitative global acne scarring grading system	79
8.	Clinical and Pathological findings on Laser side before & after treatment	81
9.	Clinical and Pathological findings on Dermaroller side before & after treatment	84
10.	Comparison between Clinical and Pathological findings on both sides following Laser & Dermaroller	87

List of Figures

<i>Figure No.</i>	<i>Title</i>	<i>Page</i>
1.	Lesion progression in a acne.	8
2.	P.acne, tumor necrosis factor alpha, and IL-1 alpha stimulate TLR2 gene expression through mitogen-activated protein kinase (MAPK) pathway.	9
3.	Atrophic acne scar subtypes.	17
4.	Needle-studded rolling pin	34
5.	Different patterns of epidermal and dermal thermal damage	39
6.	Histology of MTZ showing homogenization of dermal matrix and the formation of MENDs.	41
7.	Effects of nonablative laser treatments on matrix proteins	42
8.	Effects of nonablative laser treatments on matrix proteins.	47
9.	Effects of nonablative laser treatments on matrix modulators.	47
10.	Biopsies taken 1 hour after laser exposure reveal a characteristic intact stratum corneum overlying a well defined area of epidermal and dermal thermal damage.	50
11.	Day1 after FP(200_H&E).MTZsare outlined in black. Microscopic epidermal necrotic debris (MENDs; black arrows) represents the elimination of thermally damaged keratinocytes.	51
12.	Phase I of the inflammatory response showing the cascade of cytokines and growth factors following the initial injury of needling.	65
13.	Phase II of the inflammatory response, which is predominantly the stage of tissue proliferation	66
14.	The final remodeling phase of healing after PCI, which takes many months.	68
15.	Histologic section of skin showing puncture sites where the needle has penetrated (arrows) and generally divided cells from each other rather than cutting through the cells.	70
16.	Histologic section shows that the needle tractpenetrates to a depth of about 1.5 to 2 mm through the papillary dermis into the reticular dermis (hematoxylineosin, original magnification _40).	70