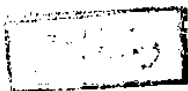


D

MANAGEMENT OF FACIAL BURNS A COMPARATIVE STUDY OF DIFFERENT TREATMENT MODALITIES



Thesis

Submitted for the partial fulfilment for the Master.
Degree in **General Surgery**

Presented by

Yasser Aly Badr El Deen

M.B., B.Ch.

617.25
Y. A

53349

Supervised by

Dr. Amr Aly Salah Mahmoud

Assist Prof. of Plastic & Reconstructive Surgery

Faculty of Medicine

Ain Shams University

Dr. Amr Abd El-Wahab Reda Mabrouk

Lecturer of Plastic & Reconstructive Surgery

Faculty of Medicine

Ain Shams University

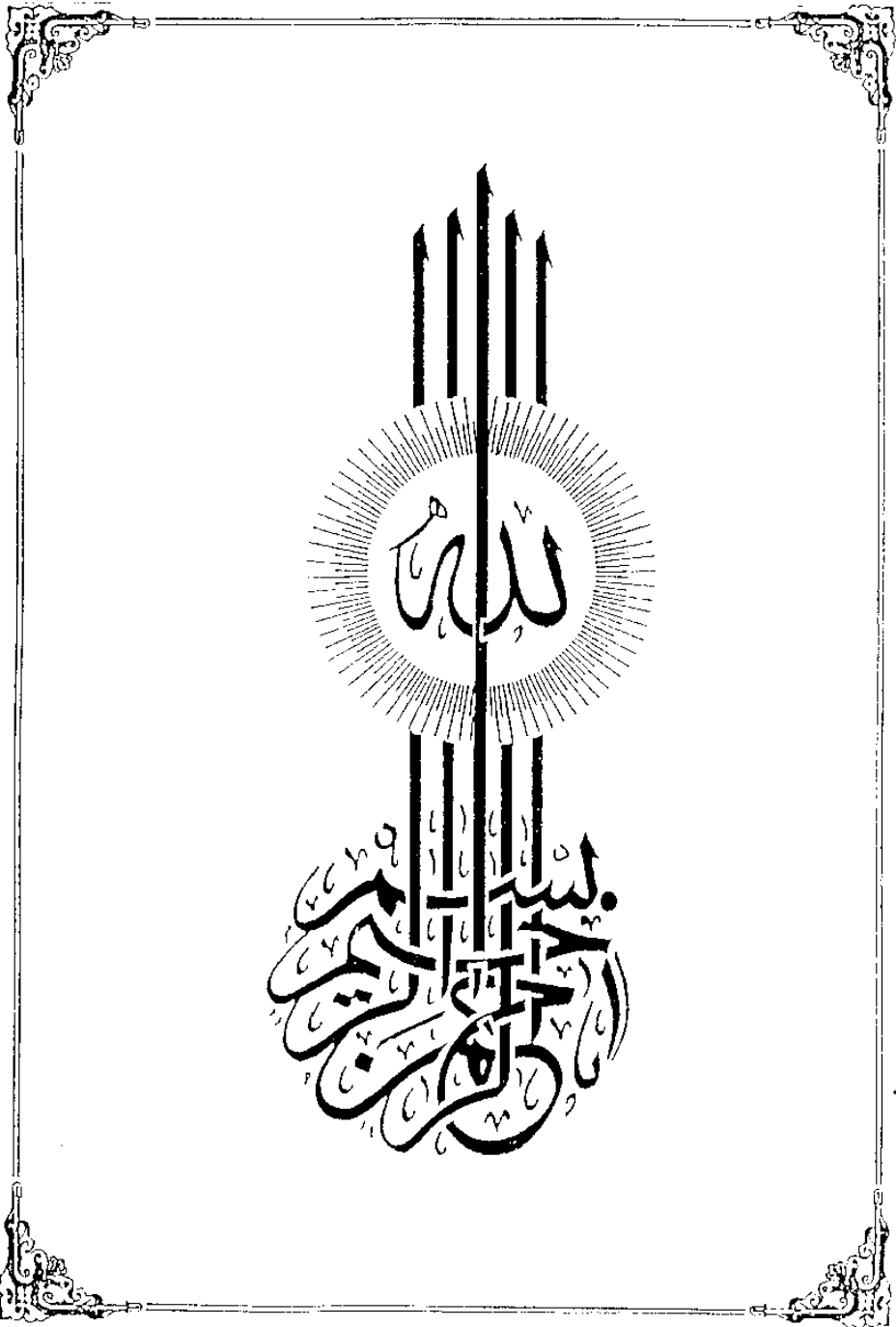
[Handwritten signature]



Faculty of Medicine
Ain Shams University

1997

[Handwritten signature]



ACKNOWLEDGMENT

With the most cordial feeling of thankfulness, I wish to express my gratitude to ***Prof. Dr. Amr Ali Salah Mahmoud***, Assistant Professor Of Plastic and Reconstructive Surgery, Faculty of Medicine, Ain Shams University, who was the supervisor of this thesis and without his noble character, generous attitude and kind sympathy, this work would have never been accomplished.

I wish to express my deep gratitude to ***Dr. Amr Abd El-Wahab Reda Mabrouk***, Lecturer Of Plastic and Reconstructive Surgery, Faculty of Medicine, Ain Shams University, through his continuous interest, constructive supervision and kind encouragement throughout the whole study.

I would like also to express my thanks to all medical and working staff in the burn unit of El-Demerdash Hospital and thankful gratitude is due to all those who gave their help in a way that made possible the production of the present work.

Contents

	Page
Introduction	1
Aim of The Work	5
Review of Literature	6-88
• Anatomy of the face	6
• Aetiology of facial burn	21
• Pathology of burned face	26
• Wound healing following burn injury	29
• Pathophysiology of the local burn injury	34
• General management of facial burns	45
• Local management of facial burns	51
• Management of late complications of facial burnes	70
Material and methods	89
Results	102
Discussion	117
Summary and Conclusion	134
References	138
Arabic Summary.	

List of Figures

Fig. No.		Page
1	Tension lines of the face	6
2	Muscles of the face and sensory nerve supply	8
3	Junction of the facial muscles at the angle of the mouth	9
4	Sensory nerve supply of the face	13
5	Arterial supply of the face	15
6	Venous drainage of the face	16
7	Anatomical segments of the eye lid	18
8	Aesthetic proportions of the ear	20
9	Chemical burn of the face	23
10	Electrical burn of the mouth	24
11	Superficial dermal facial burn	27
12	Full-thickness facial burn	28
13	Mechanism of contraction	30
14	Burn contractures	32
15	Concentric zones of local burn injury	34
16	Facial burn with 3 concentric zones	35
17	Effect of thermal trauma	36
18	Free oxygen radicle	37
19	Scheme of inflammatory mediators	38

Fig. No.		Page
20	Oedema of the face in the early post burn	39
21	Full-thickness burn with inhalation injury	43
22	Full-thickness of the beard region of the face	44
23	Mixed facial burn with endotracheal intubation	45
24	Full-thickness burn of the neck with early tracheostomy	46
25	Excision of the burned face	57
26	Aesthetic units of the face	58
27	Electric dermatome-graftknife	59
28	High energy flash burn	60
29	Naso grastic tube secured by cloth tape around the head	64
30	Swelling of the burned ear	65
31	Suppurative chondritis	67
32	A device for burned mouth	69
33	Hypertrophic scar of the face	71
34	Transparent face mask	72
35	Tracrction frame	76
36	Washio flap for nasal reconstruction	78
37	Inner arm flap for nasal reconstruction	79

Fig. No.		Page
38	F.T.S.G. for ectropion of the lower eye lid	82
39	Reconstruction of the eye brow by scalp flap	84
40	Resurfacing of the upper and lower lips	87
41	Example of escharotomy	93
42	Four antimicrobial agents for the prospective group	95
43	Early hypopigmentation in superficial burn	106
44	Dermazin and Bacitracin in one patient	107
45	Burning pain of tribiotic spray	109
46	Hyperpigmentation in superficial burn	110
47	Tribiotic Spray and Tincture Benzoin in one patient	112
48	Contact dermatitis of Tincture Benzoin	113
49	Saline dressing in superficial burn	115

List of Tables

Table No.		Page
1	Retrospective group	42
2	Prospective group	44
3	Subgroup of Bacitracin	46
4	Subgroup of Dermazin	96
5	Subgroup of Tribiotic Spray	97
6	Subgroup of Tincture Benzoin	98
7	Subgroup of Physiological Saline	98
8	Results of Retrospective group	104
9	Results of Bacitracin	106
10	Results of Dermazin	108
11	Results of Tribiotic Spray	111
12	Results of Tincture Benzoin	114
13	Results of Physiological Saline	116
14	Formulaes for resuscitation of fluid used	120-121
15	Formulas used for estimating nutritional requirments	123

Introduction

