



شبكة المعلومات الجامعية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ





شبكة المعلومات الجامعية



شبكة المعلومات الجامعية

التوثيق الالكتروني والميكرو فيلم

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد اعدت دون أية تغيرات



يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15 – 20 مئوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of
15 – 25c and relative humidity 20-40 %



شبكة المعلومات الجامعية



بعض الوثائق الأصلية تالفة



شبكة المعلومات الجامعية



بالرسالة صفحات
لم ترد بالأصل



**POST TONSILLECTOMY ANALGESIA
USING BUPIVACAINE WITH EVALUATION
OF ITS SERUM LEVEL, A PRE-EMPTIVE
AND POSTOPERATIVE STUDY**

THESIS

Submitted for partial fulfillment of the requirement for
the master degree in Anaesthesia

By

Sohair Abdel-Rahman Farghaly

(M.B.B.Ch.)

Supervised by

Dr. Fatma Gadel-Rab E. Askar

*Ass. Prof. of Anaesthesiology
Faculty of Medicine, Assiut University*

Dr. Mohamed M. Kamal El-Den

*Ass. Prof. of E.N.T.
Faculty of Medicine, Assiut University*

Dr. Samy El-Said S. A. Emara

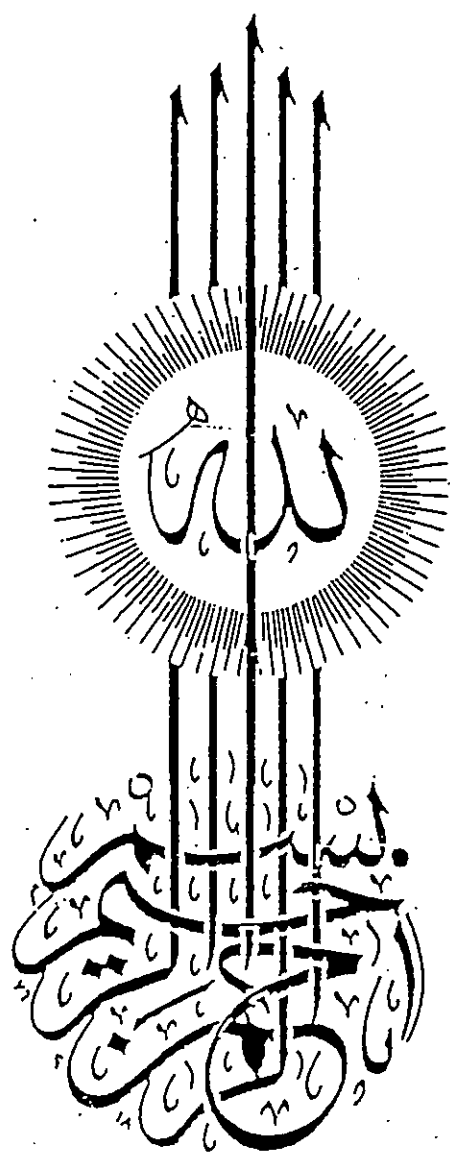
*Lecturer of Pharmaceutical and Analytical
Chemistry, Faculty of Pharmacy
Suez-Canal University*

*Faculty of Medicine
Assiut University*

1998

B

1.80.



All Thanks To

ALLAH

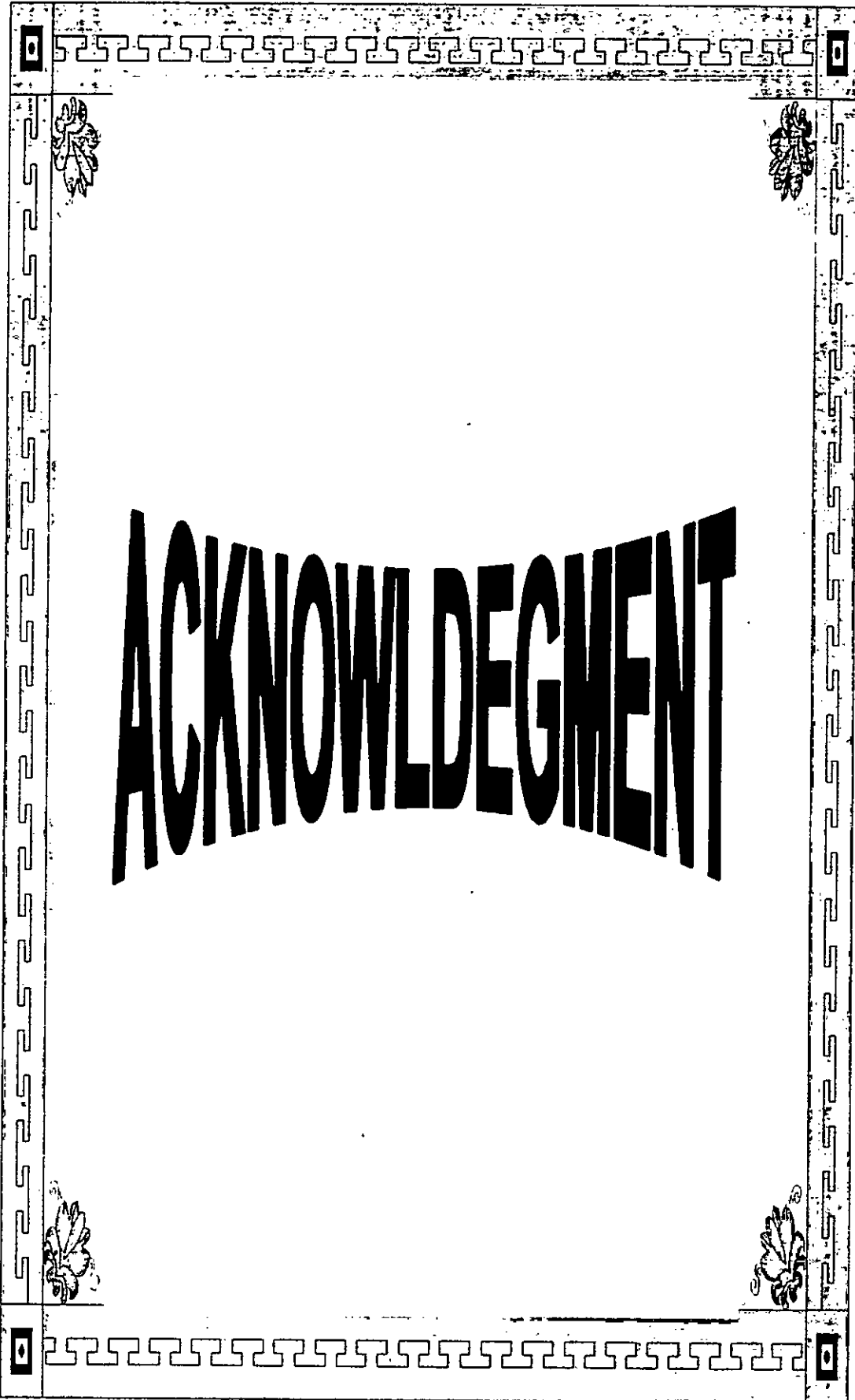
Great of All

For The Countless Gifts

I Have Been Offered

All Greatest Gratefulness To

MY FAMILY



ACKNOWLEDGMENT

ACKNOWLEDGMENT

This work would never be crowned by success without the blessing of  to whom my loyalty will remain forever beyond any compromise.

I appreciate greatly the help I have received from every one who has contributed to this thesis.

*I would like to express my profound gratitude and deep thanks to **Dr. Fatma Gad El-Rab E. Askar**, associate professor of Anaesthesiology, Faculty of Medicine, Assiut University, for suggesting the subject of the thesis, continuous supervision, and for the benefit of her experience and knowledge.*

*My deepest gratitude and thanks to **Dr. Mohamed M. Kamal El-Den**, Associate professor of E.N.T., Faculty of Medicine, Assiut University, for his valuable supervision, constructive criticism and continuous encouragement and guidance.*

*I would like to express my immense gratitude and thanks to my kind teacher **Dr. Samy El-Said S.A. Emara**, lecturer in the department of pharmaceuticals, Faculty of Pharmacy, Suez-canal University, for his great effort and his scientific experience in the HPLC work.*

*Every special word of thanks must be made to **Dr. Essam Sharkawy Abd-Alla**, Lecturer of Anaesthesiology, Faculty of Medicine, Assiut University, for the benefit of his extensive experience and knowledge. It goes without saying that whatever the amount of thanks I do express, it will be too little to pay back the generous support, and guidance during all steps of this thesis to him.*

*Also, my grateful thanks to **Dr. Zen El-Abdedeen Zareh**, Lecturer of Anaesthesiology, Faculty of Medicine, Assiut University, for his help and assistance throughout this work.*

Sohair Abd El-Rahman Farghaly

CONTENTS

Subjects	Page
AKNOWLEDGMENT	
INTRODUCTION AND AIM OF THE WORK	1
REVIEW OF LITERATURE	3
* Anatomy of the tonsils	3
* Pain pathway	11
* Pain & pre-emptive analgesia	16
* Clinical assessment of acute pain	27
* Post-tonsillectomy pain relief	34
* The pharmacology of local anaesthetics	41
PATIENTS AND METHODS	51
RESULTS	55
DISCUSSION	68
SUMMARY AND CONCLUSION	77
REFERENCES	80
ARABIC SUMMARY	

LIST OF FIGURES

Review:-

Fig. 1:	Landmarks of oropharynx and tonsillar beds	5
Fig. 2:	A diagram of a coronal section through the palatine tonsil	5
Fig. 3:	Transverse section at the level of the second cervical vertebra and tonsil to show the relation of oropharynx.....	7
Fig. 4:	Right lateral wall of the pharynx, to show the muscles of the palate with associated structures	7
Fig. 5:	Blood supply of tonsils	9
Fig. 6:	Dorsal horn connection of afferent neurons ascending to Rexed's lamina	13
Fig. 7:	The main ascending and descending pain transmission pathways in the spinal cord	14
Fig. 8:	Brain stem, thalamic and higher projections of ascending pain transmission pathways	15
Fig. 9:	Physiological pain	21
Fig. 10:	Clinical pain	22
Fig. 11:	Peripheral sensitization	23
Fig. 12:	Central sensitization	24
Fig. 13:	Cellular mechanisms of central sensitization	26
Fig. 14:	Face scales (Bieri et al., 1990)	32
Fig. 15:	Ward graphic rating scale (Tesler et al., 1991)	33

Results:

Fig. 1:	Comparison of mean bl. pressure in the 4 groups	56
Fig. 2:	Comparison of mean pulse rate in the 4 groups	58
Fig. 3:	Comparison of respiratory rate in the 4 groups	60
Fig. 4:	Comparison of VAS in the 4 groups	62
Fig. 5:	Comparison of % of additional analgesic requirements in the 4 groups	65
Fig. 6:	Comparison of serum level in the 4 groups	67

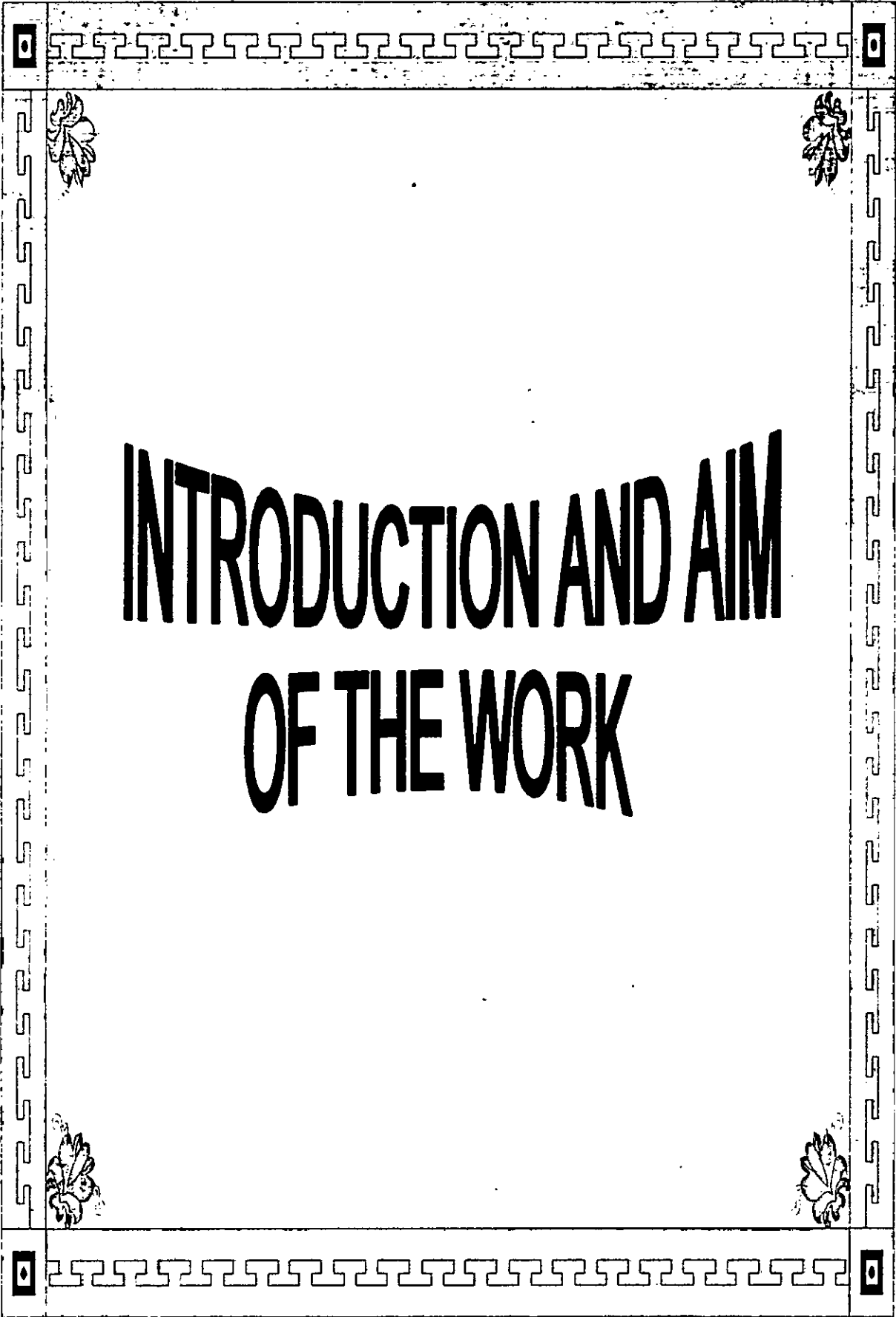
LIST OF TABLES

Review:

Table 1:	Types and classification of nociceptors	12
Table 2:	Classification of neurons	12

Results:

Table 1:	Demographic data of the patients	55
Table 2:	Comparison of mean art. bl. pr. changes in groups.....	56
Table 3:	Comparison of pulse rate/min. changes in groups	58
Table 4:	Comparison of respiratory rate/min. changes in groups	60
Table 5:	Changes in VAS in all groups	62
Table 6:	Correlation between VAS and mean art. bl. pr.	63
Table 7:	Correlation between VAS and pulse rate	63
Table 8:	Correlation between VAS and respiratory rate	63
Table 9:	Additional analgesic requirments	65
Table 10:	Comparison of bupivacaine serum level between groups	67



INTRODUCTION AND AIM OF THE WORK