



شبكة المعلومات الجامعية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



شبكة المعلومات الجامعية
@ ASUNET



شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكرو فيلم

قسم

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



يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of
15-25- c and relative humidity 20-40%

بعض الوثائق الأصلية تالفة

بالرسالة صفحات لم ترد بالاصل

٢٥١٨
٢٤

Comparative Study of Different Techniques for Intravenous Regional Anaesthesia

Thesis

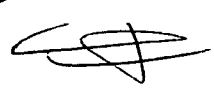
6172966

By

Safaa Mohammed Helal

M.B.B.CH.;M.Sc.

Submitted for partial fulfilment of M. D. degree
In Anaesthesiology



Supervisors

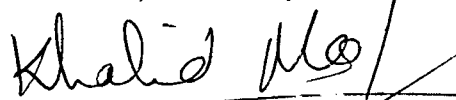
Omar Abdel Alim Omar

Prof. Dr. Samy Mohammed Haseeb
Professor of Anaesthesiology
Faculty of Medicine, Al- Azhar University

Prof. Dr. Omar Abdel Alim Omar
Professor & Head of Anaesthesiology Dept.
Faculty of Medicine, Menoufiya University

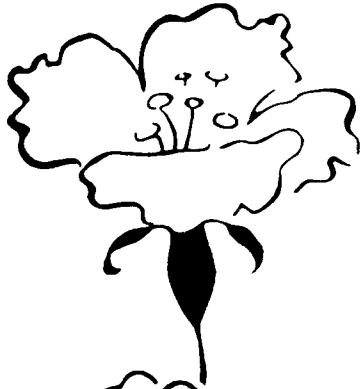
Prof. Dr. Samiya Hasan Kandil
Professor of Clinical Pathology
Faculty of Medicine, Menoufiya University

Dr. Khaled Abdel Azim Soltan
Lecturer of Anaesthesiology
Faculty of Medicine, Menoufiya University



**FACULTY OF MEDICINE
MENOUEFIYA UNIVERSITY**

1994



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

﴿رب أوزعني أن أشكر نعمتك
التي أنعمت علي و علي والدي
و أن أعمل صالحاً ترضاه
و أدخلني برحمتك في عبادك
الصالحين﴾

من الآية : ١٩ من سورة النمل

CONTENTS

I. Introduction

II. Aim Of The Work

III. Review Of Literature

- 1- History of local anaesthesia
- 2- History of IVRA
- 3- IVRA
- 4- Anatomy of peripheral nerves
- 5- Physiology of nerve conduction
- 6- Pharmacodynamics of local anaesthetic
- 7- Pharmacokinetics of local anaesthetic
- 8- Pharmacodynamics of narcotic analgesics
- 9- Pharmacokinetics of narcotic analgesics
- 10- Opioid receptors
- 11- Peripheral opioid analgesia
- 12- Pharmacodynamics of clonidine
- 13- Pharmacokinetics of clonidine

IV. Patients And Methods

V. Results

VI. Discussion

VII. Summary

VIII. Conclusion

IX. Recommendations

X. References

XI. Arabic Summary

List of Graphs

- 1- *Graph I* : Onset of analgesia.
- 2- *Graph II* : Successful no of analgesig.
- 3- *Graph III* : Postoperative analgesia.
- 4- *Graph IV* : Estimation of heart rate.
- 5- *Graph V* : Estimation of blood pressire.
- 6- *Graph VI* : Estimation of serum Na^+ level.
- 7- *Graph VII* : Estimation of Ca^{++} level.
- 8- *Graph VIII* : Estimation of K^+ level.

List of Figures

- 1 - K^+ efflux outword current: P/2.
- 2 - Lignocaine and procaine chemical Formulae: P16.
- 3 - Boold level of L-A after different routes of adminsteration:
P19.
- 4 - Systemic effect of lignocaine. P:21.
- 5 - Fentanyl and sufentanil chemical formuleas. P:27.
- 6 - Antinociceptive effect in peripheral tissue. P:51.
- 7 - General receptor model. p:53.

List of Tables

1- Kinitics of narcotic analgesics. P : 32.

2- Tables of results:

Table 1: Estimation of patients age, sex, duration of ischemia and operation time.

Table 2 : Onset of analgesia in GPI.

Table 3 : Onset of analgesia in different groups.

Table 4 : Objective pain scoring to assess intraoperative analgesia.

Table 5 : Assessment of intraoperative analgesia.

Table 6 : Estimation of heart rate at different times.

Table 7 : Estimation of MABP. at different times.

Table 8 : Estimation of serum sodium.

Table 9 : Estimation of serum potassium.

Table 10 : Estimation of serum calcium.

Table 11 : Postoperative events.

List of Abbreviations

<i>1- L.A</i>	Local anaesthetic.
<i>2- IVRA</i>	Intravenous regional anaesthesia.
<i>3-VAS</i>	Visual analogue score.
<i>4- OR</i>	Opioid receptors.
<i>5- CMRO</i>	Cerebral metabolic rate and oxygen consumption.

Errata List

- P10:** Prescence : Presence.
- P14:** Repitive : Repititive.
- P15:** Intermediated : Intermediate
- P21:** Cancntration : Concenteration.
- P23:** Drwasines : Drowsiness
- P24:** Stimulation : Stimulation.
- Opoids : Opioids.
- P30 :** Clearace : Clearance.
- P39:** Metabulized : Metabolized
- P46:** Sympatthetic : Sympathetic.
- P51:** Transposted : Transported
- P53:** Dug : Drug.
- P97:** Neuranes : Neurones.
- P99:** Remaing : Remaining
- P102:** Unpromedicated : Unpremedicated.

ACKNOWLEDGEMENT

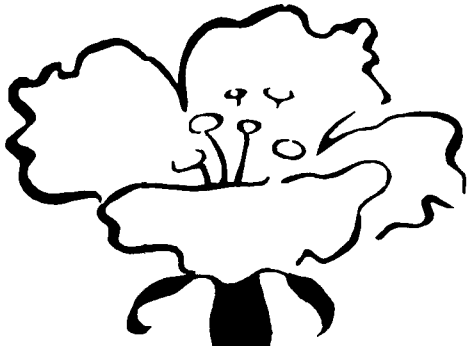
I would like to express my profound and sincere gratitude to **Prof. Dr. Samy Mohammed Haseeb**, professor of anaesthesiology Al Azhar University for his kind guidance, precious advice and fruitful criticism which enlightened the way to complete this work.

I would like to express my sincere gratitude and thanks to **Prof. Dr. Omar Abd El Alim Omar**, professor of anaesthesiology and the head of anaesthesiology department, Menoufiya University for his kind supervision, continuous guidance and encouragement.

I owe a deep gratitude and thanks to **prof. Samiya Hasan kandil** professor of clinical pathology, Menoufiya University for her valuable suggestions and endless help throughout the whole work.

I wish to extend my sincere thanks to **D. Khaled abd El Azim** lecturer of anaesthesiology, Menoufiya University for his great help and continuous encouragement to finish this work.

Many thanks to all staff members in department of anaesthesiology, Menoufiya University who were willing enough to help me to finish this work.



إهداء

إلى الأستاذ الدكتور / **علاء محمد حسين**

لأنك تعطي بتدفق النهر ..

وتتقد جذوة علمك لتتسع كنور الشمس ..

ونمد أيدينا إليك فلا نجد إلا كل خير وجمال فلن تسعفني

الكلمات لأجد ما أعبر به عنك .

استاذي الفاضل الجليل ..

أرق وأطيب المنى بموفور الصحة والسعادة .

Introduction