

سامية محمد مصطفى



شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم



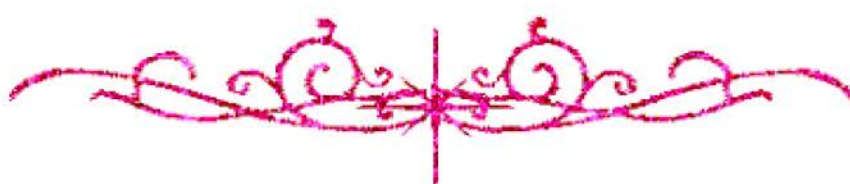
سامية محمد مصطفى



شبكة المعلومات الجامعية



شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



سامية محمد مصطفى



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

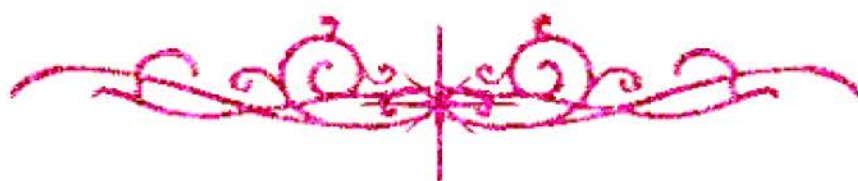
قسم

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



يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



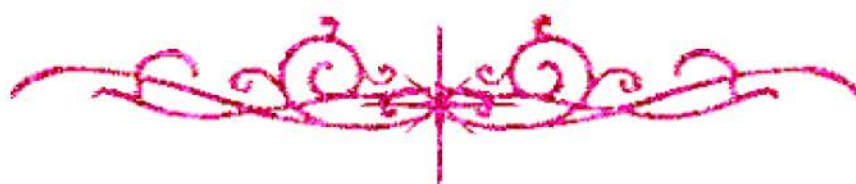
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بعض الوثائق الأصلية تالفة



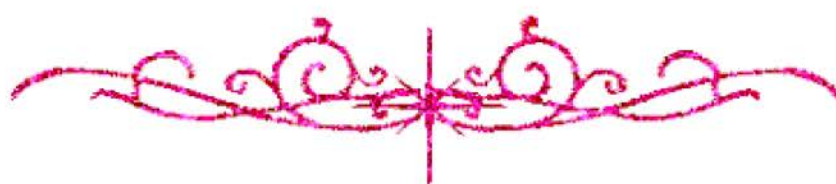
سامية محمد مصطفى



شبكة المعلومات الجامعية



بالرسالة صفحات لم ترد بالأصل



Comparative Evaluation of Renal and Hepatic Function after Long Duration Low Flow Sevoflurane and Isoflurane Anesthesia

MD Thesis

Submitted for Partial Fulfillment of MD Degree in Anesthesiology and
Pain relief

Presented by

Hossam Zarif Ghobrial

M.B.B.Ch & M.Sc

Supervised by

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Chairman of cancer biology
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National Cancer Institute
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Prof. Dr. Mohammed Mohammed Mosaad Elwasseef

Professor of Anesthesiology, ICU and Pain Relief
National Cancer Institute
Cairo University

National Cancer Institute

Cairo University

2007

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John H. H. H.

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John H. H. H.

جامعة القاهرة
معهذ الإوراء القومى

رقم مسلسل: (.....)

معضر إجتمع لجنة الحكم

على الرسالة المقدمة من الطبيب/ حامد ضريف غنيم
(١) ترملة لدخول إمتحان الدكتوراء فى /... الخمدى وكلاهما /... الخمدى
أو
(٢) كجزء من الجزء الثانى لإمتحان الماجستير فى /...

أجتمعت لجنة الحكم على الرسالة المذكورة من السادة/
الاستاذ الدكتور/ مرمم عازل سامى (عنه المضمون)
الاستاذ الدكتور/ مرمم عازل سامى (عنه المضمون)
الاستاذ الدكتور/ احمد محمد ابراهيم الطاهر (عنه المضمون)

وذلك فى يوم... الثلاثاء الموافق ٢٧/٢/٢٠١٧ فى الساعة: ١٠ /١٠
فى جلسة علنية بمرجع... المهندسة الموهبة لل...
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ثم ناقشه السادة أعضاء لجنة الحكم فى: ...
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وقدوت اللجنة: ...
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الاستاذ الدكتور

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Dedication

To my wife

I shall never forget her great support and sincere efforts in the establishment and completion of this work.

&

To my parents

For whom I will always be indebted and grateful.



ACKNOWLEDGEMENT

First and foremost, I feel always indebted to God, the most kind and the most merciful.

Words will never be able to express my deepest gratitude to all those who helped me during preparation of this study.

*I am most grateful to **Prof. Dr. Mohga Adel Samy** professor of Anesthesiology, ICU and Pain Relief, National Cancer Institute, Cairo University, who kindly supervised and motivated the performance of this work with keen interest and indispensable advice.*

*Wards will never express my deepest thanks to **Prof. Dr. Nadia Eskander Zakhary** professor of Biochemistry, Chairman of cancer biology department, National Cancer Institute, Cairo University. Without her support, encouragement and advice, this work could not be completed.*

*I am greatly honored to express my sincere appreciation to **Prof. Dr. Mohammed Mohammed Mosaad Elwasseef** professor of Anesthesiology, ICU and Pain Relief, National Cancer Institute, Cairo University, for his valuable scientific supervision and guidance.*

*I owe a particular debt of gratitude to **Dr. Emad Gerges Saleh** Lecturer of Anesthesiology, ICU and Pain Relief, National Cancer Institute, Cairo University.*

*I shall never forget the great effort of **Dr. Mofid Mohammed Selim** Specialist of Medical analysis, department of Cancer Biology, National Cancer Institute, Cairo University, in accomplishing this work.*

Abstract

The low flow anesthesia is a technique in which the fresh gas flow is significantly lower than the minute volume (less than 1L/min). This technique has many advantages including:

- Better humidification and warming to the breathing gases.
- Environmental benefits due to decrease release of the anesthetic gas to the environment.
- Cost saving as a result of reducing the consumption of the anesthetic gas.

However, sevoflurane is degraded by CO₂ absorbents (sodalime and barium hydroxide lime), the degradation products of which are polyfluorinated haloalkenes, chiefly pentafluoro isopropyl fluoromethyl ether (Also known as compound A). Compound A is nephrotoxic in dose dependent manner in rats and there is a contra verse on its effect on humans.

The rate at which CO₂ absorbents degrade sevoflurane is dependent on the concentration of the anesthetic gas, the fresh gas flow rate, the temperature of CO₂ absorbent and types of CO₂ absorbent.

The aim of this work is to compare the effect of low flow sevoflurane and isoflurane anesthesia in humans, following long duration surgery, on renal and hepatic functions.

