شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

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 الاصلية تالفة

بالرسالة صفحات لم ترد بالاصل

PRE-EMPTIVE ANALGESIA FOR THE SURGICAL REMOVAL OF IMPACTED MANDIBULAR THIRD MOLAR UNDER GENERAL ANAESTHESIA

Thesis

Submitted to the Faculty of Dentistry

University of Alexandria

In Partial Fulfillment of the Requirements

For Master Degree in

Oral surgery

By

RIHAM MOUSTAFA EL-DIBANY

B.D.S. 1994

Faculty of Dentistry

Alexandria University

1999

SUPERVISORS

PROF. DR. AHMED SALAH EL-MEHALLAWY

Prof. of Oral Surgery

Faculty of Dentistry

Alexandria University

DR. NEVINE SHAWKY MOHAMED

Asst. Prof. of Oral surgery

Faculty of Dentistry

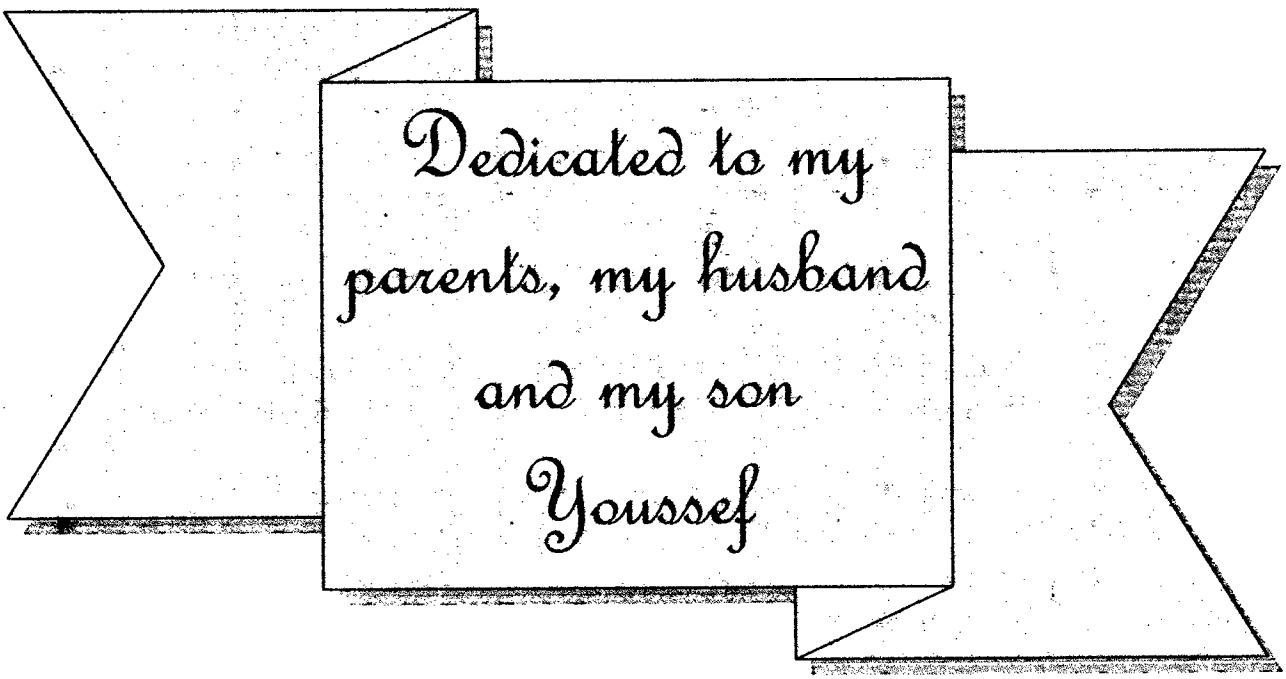
Alexandria University

DR. SAAD ABDEL RAHMAN SHETA

Lecturer of Anaesthesiology

Faculty of Medicine

Alexandria University


Dedicated to my
parents, my husband
and my son
Youssef

ACKNOWLEDGEMENTS

First of all, thanks to **GOD** the most merciful for helping me and giving me the strength to complete this work.

I have the honor to express my deepest appreciation and gratitude to ***PROF. DR. AHMED SALAH EL- MEHALLAWY,*** *Prof. of Oral Surgery, Faculty of Dentistry, Alexandria University,* for offering me much of his precious time, kind help, moral support and continuous encouragement during the entire course of this work.

My sincere thanks and deep appreciation to ***DR. NEVINE SHAWKY MOHAMED,*** *Asst. Prof. of Oral Surgery, Faculty of Dentistry, Alexandria University,* for her valuable advice, continuous support and close supervision. Without her this work could not have been possible.

I would like to thank and express my sincere gratitude and indebtedness to ***DR. SAAD ABDEL RAHMAN SHETA,*** *Lecturer of Anaesthesiology, Faculty of Medicine, Alexandria University,* for his informing guidance, valuable time and for his collaboration and close supervision which made this work possible.

I also wish to express my profound thanks to ***PROF. DR. KHALIL MOHAMED EL- KASHLAN,*** *Prof. of Public Health, Faculty of medicine, Tanta University,* for his precious time and genuine assistance and support in the statistical analysis of this work.

I would also like to thank ***all my professors and colleagues of the staff members*** *of the Oral Surgery Department, Faculty of Dentistry, Alexandria University,* for their genuine help and support through the entire course of this work.

I can never forget to thank also ***all the staff members of Anaesthesiology,*** who shared and cooperated in making this work possible.

Special thanks to the ***Egyptian International Pharmaceutical Industries Co. (E.I.P.I.Co.)*** for supplying the drug used in this study.

Finally, no words can express my deepest gratitude and thanks for the extreme support and sacrifice of ***my parents and my husband*** throughout the entire course of this work.

CONTENTS

Chapter I Introduction..... page 1

Chapter II Review of literature..... page 3

Chapter III Aim of the work..... page 34

Chapter IV Patients and Methods..... page 35

Chapter V Results..... page 50

Chapter VI Discussion..... page 101

Chapter VII Summary..... page 116

Chapter VIII Conclusions and Recommendations page 120

Chapter IX References..... page 122

Chapter X Arabic summary.....

Chapter I

Introduction

INTRODUCTION

Pain is a common and frequent human experience, which is not only a concern to the sufferer, but also to society. Pain seriously impairs the lives of millions of people around the world [1].

Poor pain control can increase patient's fear of treatment and increase their anxiety [2]. Adequate pain relief should always be given a high priority in the management of any patient. It is not acceptable to discharge patients who may experience severe post-operative pain without providing sufficient analgesia [3].

Surgical trauma activates the inflammatory process, which is a complex series of biochemical and cellular events involving a variety of inflammatory mediators which play a role in the propagation of pain, these include: prostaglandins, bradykinin and histamine [4].

The surgical removal of impacted mandibular third molar teeth often produces pain, swelling and trismus, which are the acute post-operative sequelae of inflammation due to tissue injury during the surgical procedure [5].

Nowadays, there is an increased trend for the surgical removal of impacted third molar teeth under general anaesthesia as a day case surgery [6-8]. One goal of modern anaesthesia is to ensure that patients having surgery awake from anaesthesia with excellent pain control and to maintain this control throughout the period of convalescence. Prevention, rather than treatment of severe post-operative pain is

becoming an attractive aim. The administration of analgesics before the patient emerges from general anaesthesia may result in an "acceptable" comfort level for the patient in the early post-operative period. This would be ***preventative analgesia*** [9].

In ***pre-emptive analgesia***, the analgesic treatment is given prior to the surgical trauma. Therefore, pre-emptive analgesia inhibits the noxious stimuli induced changes in the central and peripheral nervous system function that may act to increase and extend post-operative pain. Since the "memory" of acute pain is prevented, the duration of analgesic benefits derived from pre-emptively administered drugs should outlast their usual pharmacological duration of action. The benefits should be measurable in terms of reduced pain scores, longer time to first request for analgesia after surgery and more importantly an overall decrease in the amount of analgesics required [9].

Non-steroidal anti-inflammatory drugs (NSAIDs) have been increasingly used as pre-emptive analgesic drugs [10]. The ideal NSAID for day case surgery should be effective with rapid onset, minimal side effects and have a long elimination half-life. It should be easy to administer avoiding intramuscular injections and rectal administration. Although, no perfect NSAID exists, yet a relatively new agent, Tenoxicam, meets many of these criteria. Its duration of action, good safety records and intravenous formulation should make it a potentially useful analgesic for day case surgery [11].

Chapter II

Review of Literature