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 الوثائـــــــق الاصليـــــة تالفـــة

بالرسالة صفحات لم ترد بالاصل

SPINAL CORD STIMULATION IN THE MANAGEMENT OF CHRONIC PAIN

ESSAY

Submitted for partial fulfillment of the requirements for the master degree in ***ALGOLOGY***

By

DR. MAGDY FATHY FARID
M.B.B.Ch., MD.

Supervisors

Prof. Dr.
MOHAMED OMAR TAWFIK
Prof. & Head of the Pain Therapy Unit
National Cancer Institute
Cairo University

Dr.
AHMED HELMY ABOUEL SOUD
Assistant Prof. of Anesthesiology, ICU & Algology
National Cancer Institute
Cairo University

Dr.
SAMIA EL BARADIE
Lecturer of Anesthesiology, ICU & Algology
National Cancer Institute
Cairo University

National Cancer Institute
Cairo University
1999

بسم الله الرحمن الرحيم

﴿قالوا سبحانك لا علم لنا إلا ما
علمتنا إنك أنت العليم
الحكيم﴾

صدق الله العظيم

البقرة (٣٢)

ACKNOWLEDGEMENT

I wish to express my great thanks to *Prof.* ***MOHAMED OMAR TAWFIK*** Prof. & Head of The Pain Therapy Unit National Cancer Institute Cairo University, for his kind support, encouragement and continuous advice to me for completion of this work.

I am deeply indebted te *Prof.* ***AHMED HELMY ABOUEL SOUD*** Assistant Prof. of Anesthesiology, ICU & Algology National Cancer Institute Cairo University, for his kind supervision, continuous assistance, guidance and valuable help throughout this work.

My great gratitude to *Prof.* ***SAMIA EL BARADIE*** lecturer Assistant Prof. of Anesthesiology, ICU & Algology National Cancer Institute Cairo University for her genius cooperation, continuous assistance and valuable help throughout this work.

I would like to express my thanks to all my professors in Algology Department National Cancer Institute Cairo University, who are always working to create new generations & helped and encouraged me in publication of this work.

CONTENTS

* * * * *

INTRODUCTION AND AIM OF THE WORK

Spinal cord stimulation (SCS) has been used in clinical practice in the United States for more than 30 years. A new focus on patient selection, and cost effectiveness has led to a renewed interest among physicians and insurers. When used successfully, SCS provides pain reduction by modulating the pain signal at the spinal cord level. Although many theories exist on the mechanisms involved in pain alleviation, the most widely accepted theory is based on the gate control activation of inhibitory pathways.

The placement of a SCS system involves placing a stimulating electrode or electrodes into the epidural space. This is most commonly performed by the percutaneous approach, with the surgical approach reserved for special circumstances.

Patients with neuropathic pain syndromes of the extremities are classically the most appropriate candidates for SCS. The development of dual lead therapies has broadened the scope of stimulation indications.

It is recommended to be used in the treatment of failed back surgery syndrome (FBSS), complex regional pain syndromes [RSD), peripheral neuropathies, phantom limb pain and stump pain, ischemic extremity pain, intractable angina and incontinence.

In this eassy, I shall discuss the historical backgrounds of SCS (Chapter 1), followed by a detailed review of the physiology of SCS (Chapter 2), the indications of SCS (Chapter 3),the techniques of SCS (Chapter 4), the complications of SCS (Chapter 5), the different mechanisms

of SCS (Chapter 6), cost-effectiveness of SCS (Chapter 7), discussion (Chapter 8), and summery and conclusion (Chapter 9).