

شبكة المعلومات الجامعية







شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



شبكة المعلومات الجامعية

# جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

## قسم

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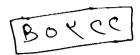
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# SPINAL CORD STIMULATION IN THE MANAGEMENT OF CHRONIC PAIN

#### **ESSAY**

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

By

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### 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 easy, 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).

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