بسم الله الرحمن الرحيم

شبكة المعلومـــــات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

﴿ قـــسـم ﴾

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
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Interventional Pain Management

Essay Submitted for the partial fulfillment of Master degree in Anaesthesiology

BY

Dina Abd El Moneim Ahmed Salem
(M.B.,Bch., Cairo University)

Supervised By

Prof. Dr. Mohamed Hany Kamal El Din
Professor Of Anaesthesiology
Faculty of Medicine - Cairo University

Dr. Fatma A.K. Abou Rabia
Lecturer of Anaesthesiology
Faculty of Medicine
Cairo University.

Dr. Gehan Ali El Kholy
Lecturer of Anaesthesiology
Faculty of Medicine
Cairo University.

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في التخدير

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بناء على موافقة الجامعة بتاريخ ٢٠ / ٥ / ٢٠٠٠ تم تشكيل لجنة الفحص والمناقشة للرسالة المذكورة أعلاه على النحو التالي :-

١) أ.د. [illegible] عن المشرفين
٢) أ.د. [illegible] ممتحن داخلي
٣) أ.د. [illegible] ممتحن خارجي

بعد فحص الرسالة بواسطة كل عضو منفردا وكتابة تقارير منفردة لكل منهم إنعقدت اللجنة مجتمعة في يوم الثلاثاء بتاريخ ١١ / ٧ / ٢٠٠٠ بقسم التخدير بكلية الطب - جامعة القاهرة وذلك لمناقشة الطالب في جلسة علنية في موضوع الرسالة والنتائج التي توصل إليها وكذلك الأسس العلمية التي قام عليها البحث .

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المشرف المستحق
أ.د. [illegible]
(صلاح)

الممتحن الداخلي
أ.د. [illegible]

الممتحن الخارجي
أ.د. [illegible]

Abstract

The treatment for the patient with chronic pain involves starting with conservative options and then progressively initiating more invasive techniques. New developments are discussed in the subject of Interventional pain management will help further patients care.

Interventional pain procedures include:

I-Spinal cord stimulation (SCS)

SCS provides pain reduction by modulating pain signal at the spinal cord level. Basics of the procedure, selection of cases, indications, outcomes and complications are discussed in details.

II- Intrathecal Drug administration (DAS)

DAS were initially used for malignant pain. In recent years DAS for non-malignant out pain has increased.

Basics of the procedure, selection of cases, indications, outcomes, and complications are discussed in details.

III- Spinal Endoscopy

Spinal Endoscopy become clinically relevant over the past few years. This increase in utilization is largely due to improvement in fiberoptic and endoscopic technologies.

Keywords

Anatomical basis

Circulation of CSF

The pain pathway

Pharmacokinetics of spinally administered drugs

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INTRODUCTION

In the past few years the public has realized the importance of treating pain. This renewed public awareness has helped to establish pain medicine as a crucial part of acceptable medical practice.

The treatment continuum for the patients with chronic pain involves starting with conservative options and then progressively initiating more invasive techniques. The widespread societal focus on alleviating suffering and appropriate treatment of pain has led to acceptance of interventional therapies early in the clinical course. To provide a complete pain service, the practitioner must be able to offer the next step is treatment options when conservative therapy fails. Interventional pain frequent encompasses many treatment modalities. The most important of which are : Spinal cord stimulation (**SCS**) , Intrathecal Drug Administration Systems (**DAS**), and Spinal Endoscopy (**SE**) because of their clinical relevance and recent advances.

Chapter One

Anatomical Basis

The Vertebrae and Sacrum

The bones of vertebral canal are landmarks, by which the anaesthetists perform spinal and extradural blockades.

There are seven cervical, twelve thoracic and five lumbar vertebrae. The sacrum comprises five and the coccyx four fused segments respectively. The adult spine represent four curvatures, the cervical and lumbar zones are convex forwards, the thoracic and sacral regions are concave. The typical cervical vertebrae are C3 – 6. The typical thoracic vertebrae are T2 – 8. **(Harold Ellis and Stanly Feldman,1993)**

Spinal Meninges

The spinal cord has 3 coverings – the dura, arachnoid, and piamater.

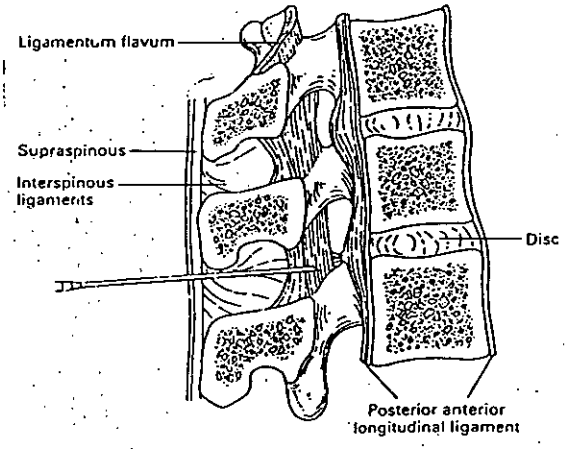

Fig.(1) :The anatomy of lumbar puncture.(Harold Ellis,1993)