شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومـــات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

﴿ قـسـم ﴾

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
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بالرسالة صفحات

لم ترد بالأصـــل

Recent Advances in Diagnosis of Carpal Tunnel Syndrome

Essay

Submitted in Partial Fulfillment for
Master Degree (M.Sc.) in
Rheumatology and Rehabilitation

By
Samah Mustafa Fayed
(M.B., B.Ch.)

Supervisors

Assist. Prof. Dr. **Eman M. El-Serougy**
Assist. Professor of Rheumatology and Rehabilitation
Faculty of Medicine, Cairo University

Dr. **Hatem El-Eishi**
Lecturer of Rheumatology and Rehabilitation
Faculty of Medicine, Cairo University

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القسم العلمي

محضر

اجتماع لجنة الحكم على الرسالة المقدمة من
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في [illegible]

عنوان الرسالة باللغة الانجليزية : Recent advances in Diagnosis of Carpal Tunnel Syndrome

: باللغة العربية [illegible]

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(١) [illegible]
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بعد فحص الرسالة بواسطة كل منهم منفردا وكتابة تقارير منفردة لكل منهم اجتمعت اللجنة مجتمعة في يوم [illegible] بتاريخ / / ١٩ بقسم [illegible] بكلية الطب - جامعة القاهرة وذلك لمناقشة الطالب في جلسة علنية في موضوع الرسالة والنتائج التي توصل إليها وكذا الأسس العلمية التي قام عليها البحث .

قرار اللجنة : [illegible]

توقيعات أعضاء اللجنة :-

المشرف المتحن
[illegible]
(ختام)

الممتحن الداخلي
[illegible]

الممتحن الخارجي
[illegible]

Contents

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INTRODUCTION AND AIM OF THE WORK

Carpal tunnel syndrome (CTS) is frequently recognized compression neuropathy of the median nerve, the wrist flexion Phalen's test **(Phalen, 1987)**, Tinel's sign and the tourniquet test (Gilliat test), **(Gilliat and Wilson, 1953)** and direct compression on the carpal canal Durkan's test **(Durkan, 1991)** have become standard assessment tools in the diagnosis of CTS. Recently the proximal migration of lumbrical muscles into the carpal tunnel during finger flexion was observed; a clenched fist test was suggested as an additional provocative test for CTS **(Cobb et al., 1994)**.

Suspected carpal tunnel syndrome is one of the commonest referrals to the EMG clinic and many electrophysiological tests have been employed in its diagnosis **(Stevens, 1987)**.

Recently, another test of median nerve function, the lumbrical interosseous distal motor latency difference, (2L1-DML has been introduced, but opinions on its value differs sharply **(Preston and Logigian, 1992; Uncini et al., 1993 and Preston et al., 1994)**.

Carpal tunnel syndrome is easily diagnosed by its clinical and electrophysiological features. In patients with more than mild pathological neurological and electrophysiological findings, surgical treatment is usually indicated and curative. However the decision to treat by surgery is not always straight forward. Up to 10% of the carpal tunnels that are operated on show a normal anatomy of the carpal tunnel, and in a further 30% no compressive lesion is seen **(Benini, 1975)** so that the validity of the decision for operation in these cases is questionable. Anatomical information prior to treatment should help to improve the rationale of treatment. Imaging of the carpal tunnel by Magnetic Resonance Imaging (MRI) has revealed typical alterations of the carpal tunnel contents **(Middleton et al., 1987)**. In order to characterize better its value in the staging of this disease we used MRI to

determine the causative lesions and median nerve damage in CTS. We compared these findings with the most widely applied electrophysiological parameter in CTS, the distal latencies of the median nerve.

The **aim** of our study is to review all recent advances in diagnosis. (clinical-mechanical-electrophysiological radiological) of the carpal tunnel syndrome and to evaluate each function of these tools by reviewing other author's opinions in using them.