



بسم الله الرحمن الرحيم

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تم عمل المسح الضوئي لهذه الرسالة بواسطة / سامية زكى يوسف

بقسم التوثيق الإلكتروني بمركز الشبكات وتكنولوجيا المعلومات دون أدنى

مسئولية عن محتوى هذه الرسالة.

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**ROLE OF ULTRASONOGRAPHY AND
MAGNETIC RESONANCE
IN THE EVALUATION OF
CARPAL TUNNEL SYNDROME,
COMPARATIVE STUDY WITH
ELECTROPHYSIOLOGICAL EXAMINATION**

Thesis

Submitted in partial fulfillment of the
M.Sc. degree in Radiodiagnosis

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اجتماع لجنة الحكم على الرسالة المقدمة

من الطيبة/ رانيا زكريا أبو العز

توطئة للحصول على درجة: الماجستير

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تحت عنوان: باللغة الإنجليزية

ROLE OF ULTRASONOGRAPHY
AND MAGNETIC RESONANCE
IN THE EVALUATION OF CARPAL TUNNEL SYNDROME;
COMPARATIVE STUDY WITH ELECTROPHYSIOLOGICAL
EXAMINATION

تحت عنوان: باللغة العربية

دور فحص الموجات الصوتية والرتين المغناطيسي في تقييم متلازمة النفق الرمخي المرضية
دراسة مقارنة مع فحص النسيولوجيا العصبية

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ABSTRACT

The current gold standard investigation of carpal tunnel syndrome following clinical examination is the nerve conduction studies. However, high-resolution real-time ultrasound examination is considered an accurate, satisfactory and dynamic diagnostic modality for diagnosis of carpal tunnel syndrome. Through the high-resolution images this modality can clearly show the median nerve, related tendons and the intervening tissues and it can help in assessing the possible etiology of nerve compression as (tenosynovitis). MRI; with its excellent contrast resolution, have a complementary role of ultrasound in assessment of equivocal & recurrent postoperative cases. It gives a comprehensive anatomical study of the carpal tunnel and its contents.

KEY WORDS

Carpal tunnel syndrome

Nerve conduction studies

Median nerve

High- resolution ultrasound

MRI

The first part of the report deals with the general situation of the country and the progress of the war. It is followed by a detailed account of the operations of the army and the navy. The report concludes with a summary of the achievements of the year and a forecast for the future.

The operations of the army were marked by a series of successful campaigns. The first of these was the capture of the city of ... The second was the ... The third was the ... The fourth was the ... The fifth was the ... The sixth was the ... The seventh was the ... The eighth was the ... The ninth was the ... The tenth was the ...

The operations of the navy were also successful. The first of these was the capture of the ... The second was the ... The third was the ... The fourth was the ... The fifth was the ... The sixth was the ... The seventh was the ... The eighth was the ... The ninth was the ... The tenth was the ...

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Thanks to God who enabled us to finish this work

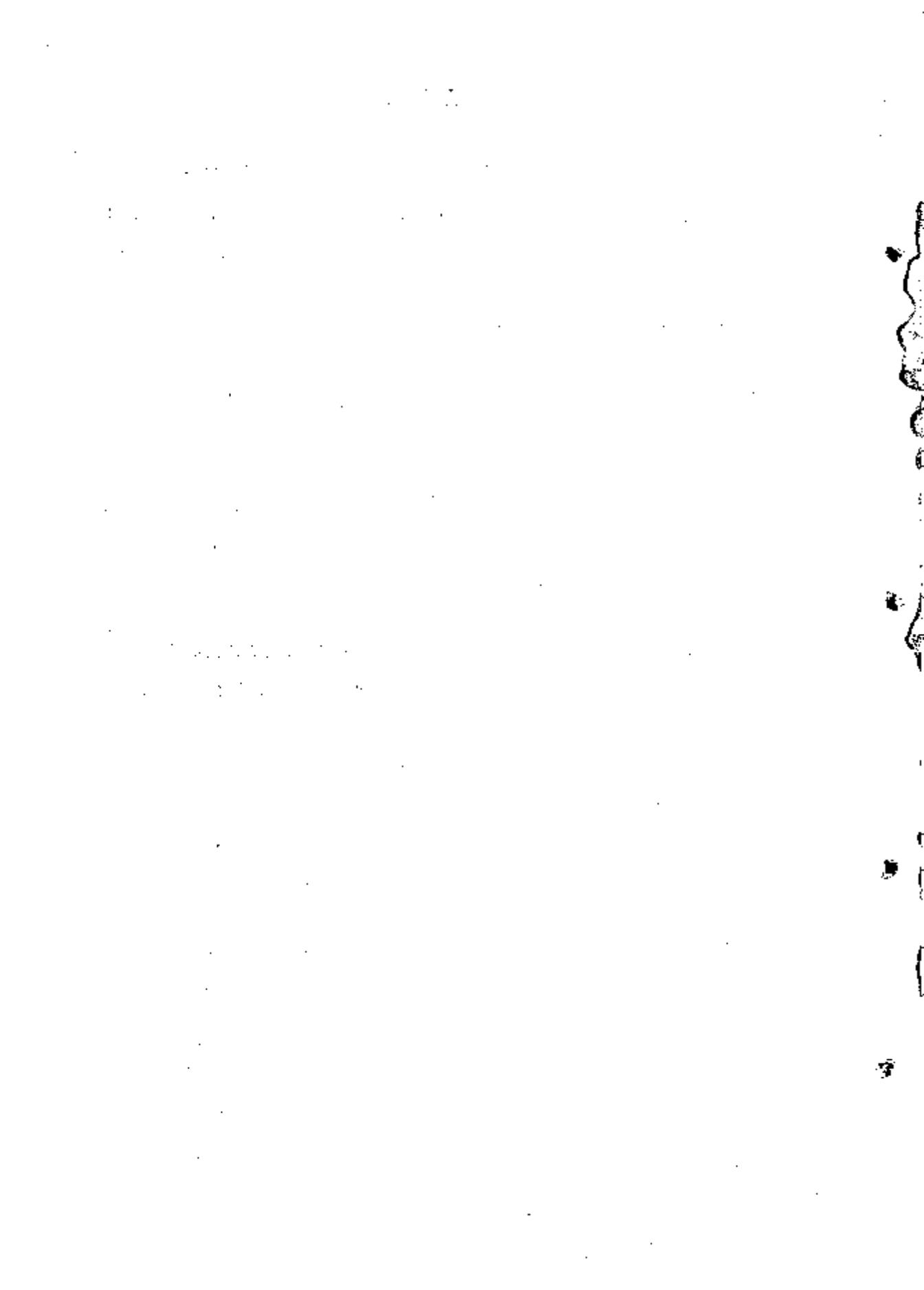
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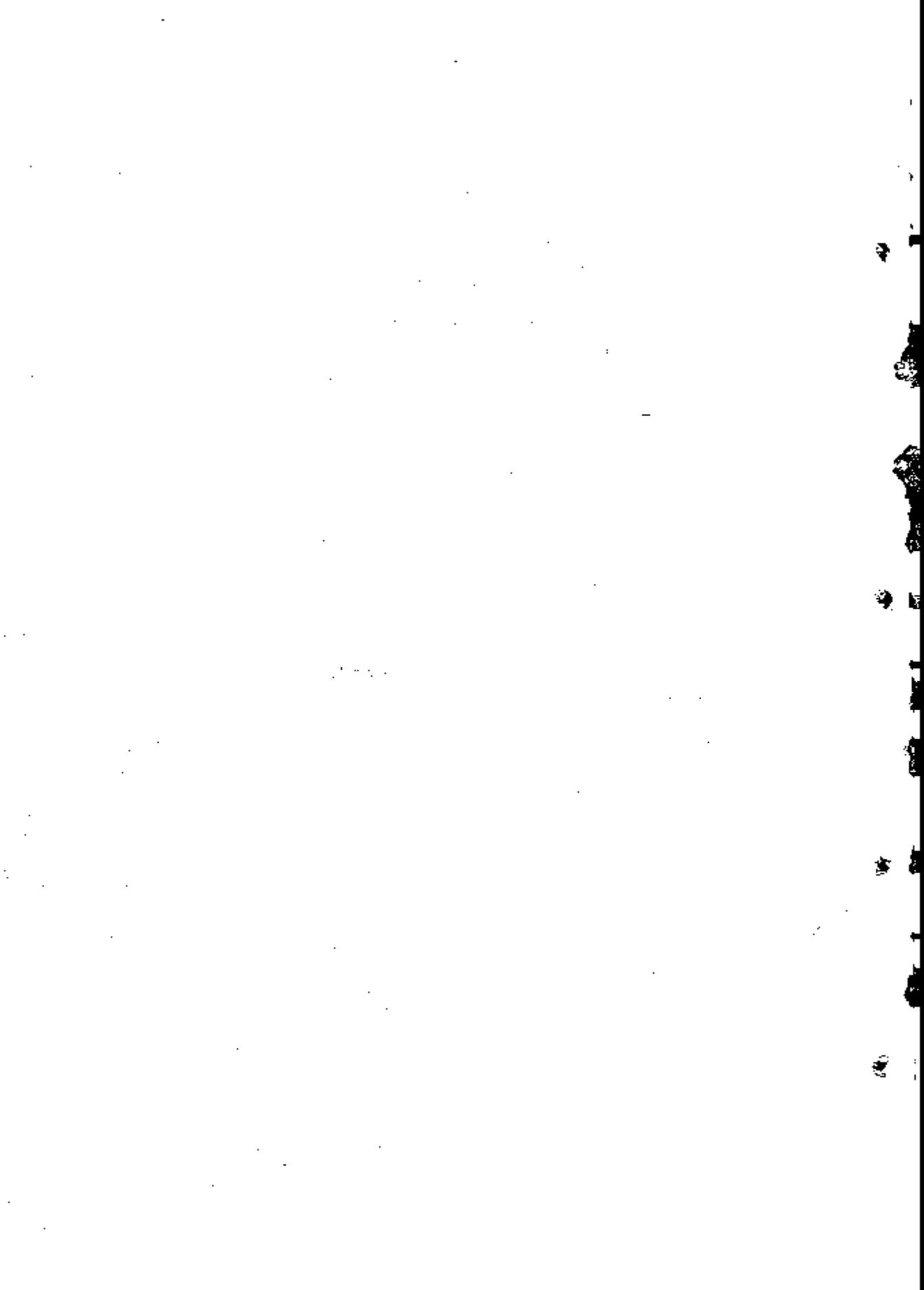
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LIST OF ABBREVIATIONS

AP=abductor polices
AP= anteroposterior diameter of carpal tunnel
APL=abductor pollicis longus
C= capitate bone
CTR= carpal tunnel release
CTS=carpal tunnel syndrome
CV= cephalic vein
DSH= dorsal scaphoid- hamate ligament
ECRB= extensor carpi radialis brevis
ECRL= extensor carpi radialis longus
ECU= extensor carpi ulnaris
ED= extensor digitorum
EDM= extensor digitorum minimi
EI= extensor indices
EPB= extensor polices brevis
EPL= extensor polices longus
FCR= flexor carpi radialis
FCU= flexor carpi ulnaris
FDP= flexor digitorum profundus
FDS= flexor digitorum superficialis
FPL= flexor pollicis longus
H=hamate bone
Ht=hypothenar muscle
FR= flexor retinaculum
M= metacarpal bone(M1= first,M2=second)
Mn=median nerve
MRI- MR= magnetic resonance
NC= nerve conduction studies
P=pisiform
PA= palmar aponeurosis
PCTm= palmar capitate-trapezium ligament
PL= palmaris longus
PQ= pronator quadratus
PS= Parona space
PST= palmar scaphoid-triquetral ligament
S/ Sc= scaphoid
Td= trapezoid
Th= thenar muscles
Tm= trapezium
Tq=triquetrum
MN=median nerve
RA= radial artery
RT=radial tubercle
UA=ulnar artery
UN= ulnar nerve



INTRODUCTION

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AIM OF THE WORK

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