بسم الله الرحمن الرحيم

MONA MAGHRABY

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

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شبكة المعلومات الجامعية

التوثيق الإلكتروني والميكروفيلم

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
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MONA MAGHRABY

The role of extracorporeal shockwave therapy (ESWT) in treatment of trigger finger

Thesis

Submitted for partial fulfillment of Master Degree

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دور العلاج بالموجات فوق الصوتية خارج الجسم في علاج الإصبـــــع الزنـــــاد

رسالة

توطئة للحصول علي درجة الماجستير في الطب الطبيعي والروماتيزم والتأهيل

مقدمة من

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List of Abbreviations

Abbreviation	Full Form
CGRP	: Calcitonin gene related peptide
COX	: Cyclo- oxegenase
DASH	: Disabilities of arm, shoulder and hand
ESWT	: Extra corporeal shock wave therapy
FCR	: Flexor carpi radialis
FDP	: Flexor digitorum profundus
FDS	: Flexor digitorum superficialis
FPL	: Flexor pollicis longus
FR	: Flexor retinaculum
FSWT	: Focused shock wave therapy
GM CSF	: Granulocyte- macrophage colony- stimulating factor
MCP	: Metacarpophalangeal
MCP-2	: Monocyte chemotactic protein 2
IGF-1	: Insulin like growth factor 1
MSUS	: Musculoskeletal ultra sound
NF-kb	: Nuclear factor kappa light chain enhancer of activated B cells Active
NSAIDs	: Non-steroidal anti-inflammatory drugs
NPRS	: Numeric pain rating scale
PA	: Palmar aponeurosis
PIP	: Proximal inter phalangeal
PLA2	: Phospholipase A2
ROM	: Range of motion
rESWT	: Radial extracorporeal shock wave therapy
TCL	: Transverse carpal ligament
TENS	: Trans cutaneous electrical nerve stimulation
TGF-beta 1	: Transforming growth factor
US	: Ultra sound
VAS	: Visual analogue scale

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INTRODUCTION

Trigger finger is one of the most common causes of pain and disability of the hand ***(Lee et al., 2019)***. It is a condition that occurs when the gliding movement of the tendon is blocked by the osteofibrous canal of the A1 pulley. Preventing the tendon from naturally extending and returning to its initial position ***(Sharma & sah 2017)***.

It's considered one of the most common hand conditions with 3% prevalence, it commonly presents in middle age women with pain, swelling and limitation of movement. It usually involves the thumb and ring fingers of the dominant hand. The disease can be primary or may occur secondary to rheumatoid arthritis, diabetes mellitus, gout, de Quervain's disease or direct tendon trauma ***(Bishnu et al., 2018)***.

Primary trigger finger occurs most commonly in the middle Fifth to sixth decades of life and up to 6 times more frequently in women than men (**Teo et al., 2018)**. The lifetime risk of trigger finger development is between 2 to 3%, but increases up to 10% in diabetics. The ring finger is most commonly affected, followed by the thumb (trigger thumb), middle, index, and small fingers in Patients with multiple trigger digits ***(LIN et al., 2018)***.