Role of dexamethasone iontophoresis in treatment of epicondylitis evaluated by quantitative high resolution ultrasonography

Thesis

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Contents

Page

List of Abbreviations

CEO..... Common extensor origin
CFO..... Common flexor origin
cm..... centimeter
DC ..... Direct Current
DXM ..... Dexamethasone
DXM-P ..... Dexamethasone Sodium Phosphate
ECRB..... Extensor carpi radialis brevis
ESR..... Erythrocyte Sedimentation Rate
ESWT ..... Extracorporeal shock wave therapy
Grip S..... Maximum grip strength of the sound site
LLLT..... Lower level laser therapy
mA.....milli Ampere
MCT..... Medial conjoint tendon
MGF..... Maximum grip force of the affected site
MHz..... Mega Hertz
ml .....milli litre
mm .....millimeter
MRI ..... Magnetic Resonance Imaging
MWM..... Mobilization with movement
NSAIDs..... Nonsteroidal Anti-inflammatory drugs
PGA..... Patient global assessment
PFGF..... Pain-free grip force of the affected site
PSI..... Pound per square feet
STIR..... short tau inversion recovery sequence
UCL..... Ulnar collateral ligament
US..... Ultrasonography
VAS..... Visual Analogue Scale

List of Figures

List of Tables

List of Images

Introduction

Medial or lateral epicondylitis is the most common disorder of the elbow in adults, with an incidence of 4 to 7 per 1000 per year seen in general practice with an average episode estimated between six months to two years. It occurs in men more than women and tends to involve the dominant hand of the subject ***(Nirschel et al., 2003 and McRae, 2004).***

Epicondylitis is believed to occur due to strain on the tendons of the forearm muscles at the points of their attachment to the elbow, either on the common extensor origin in lateral epicondylitis, or the common flexor origin in medial epicondylitis; leading to inflammation and ultimately to degenerative changes such as tendinosis, micro tears, and fibrous tissue healing at these points ***(Nirschel et al., 2003 and McRae 2004).***

Lateral epicondylitis is diagnosed clinically by its characteristic presentation: which is pain on the lateral aspect of the elbow that increases by strenuous use of the hand and forearm. On examination it reveals lateral epicondylar tenderness with pain on resisted extension of the wrist ***(Harrington et al, 1998).***