Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Comparison of the effectiveness of Ultrasound and Deep transverse friction massage on pain relief and grip strength in lateral epicondilitis of humerous

Protocol summary

Summary

Goal: To compare two different methods, deep transverse friction massage and Ultrasound in reducing pain and increasing Hand grip in lateral epicondilitis Material: Patients who diagnosed of lateral epicondilitis according to examination and have duration of complain more than 6 weeks included in study. Recent trauma, injection or surgery, neck or shoulder pain, use of steroids or Nsaid's and previous history of rheumatologic disorders are exclusion criteria. Patients randomly entered to deep friction massage or ultrasound groups. Method: Patients in deep friction massage group were treated for 5 sessions, and patients in Ultrasound group were received treatment for 10 sessions. Pain during daily activities and in resisted physical examinations using visual analog pain scale and grip strength by hand dynamo meter were measured before study and just after last session and also in later one month follow up sessions.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201101293384N6**
Registration date: **2011-11-20, 1390/08/29**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2011-11-20, 1390/08/29

Registrant information

Name

Ameneh Ebrahim Valoojerdi

Name of organization / entity

Endocrine research center

Country

Iran (Islamic Republic of)

Phone

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Email address

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Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Tehran University of Medical Sciences

Expected recruitment start date

2011-04-04, 1390/01/15

Expected recruitment end date

2012-08-03, 1391/05/13

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of the effectiveness of Ultrasound and Deep transverse friction massage on pain relief and grip strength in lateral epicondilitis of humerous

Public title

Comparison of the effectiveness of Ultrasound and Deep transverse friction massage on pain relief and grip strength in lateral epicondilitis of humerous

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: All the patients who lateral humeral epicondylitis according to the examinations and the duration of their signs is more than 6 weeks Exclusion

criteria:Direct trauma history; previous surgical history ;previous injection history; elbow manipulation ; elbow physiotherapy in previous 6 month ;NSAID's use ; narcotics ; topical anesthetics ; photosensitivity ; generalized skin disease;rhumatoid disease ; mental disease ; pregnancy ; pacemaker

Age
No age limit

Gender
Both

Phase
2

Groups that have been masked
No information

Sample size
Target sample size: **50**

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
The Ethics Committee of Tehran University of Medical Sciences

Street address
TUMS, Ghods St.,Keshavarz Blvd,

City
Tehran

Postal code
1417653761

Approval date
2011-06-21, 1390/03/31

Ethics committee reference number
130/1328

Health conditions studied

1

Description of health condition studied
Lateral epicondylitis

ICD-10 code
M77.1

ICD-10 code description
Lateral epicondylitis

Primary outcomes

1

Description
pain

Timepoint
alternate day (5 times)

Method of measurement
visual analog scale

Secondary outcomes

1

Description
provocative tests

Timepoint
alternative day (5 times)

Method of measurement
provocative tests

2

Description
Grip strength

Timepoint
Each therapeutic sessions

Method of measurement
Hand dynamometer

Intervention groups

1

Description
Intervention: deep friction massage

Category
Rehabilitation

2

Description
control: ultrasound therapy intensity 2w/cm2 and pulse 20%

Category
Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center
Hazrat Rasoul Hospital

Full name of responsible person

Street address

City
Tehran

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Vice chancellor for research, Tehran University of Medical Sciences
Full name of responsible person
Dr. Akbar Fotuhi
Street address
Tehran University of Medical Sciences , Ghods street , Keshavarz street , Vice chancellor for research, Tehran University of Medical Sciences
City
Tehran
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Vice chancellor for research, Tehran University of Medical Sciences
Proportion provided by this source
100
Public or private sector
empty
Domestic or foreign origin
empty
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
empty

Person responsible for general inquiries

Contact
Name of organization / entity
Rasoul Akram Hospital
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Sharing plan

Deidentified Individual Participant Data Set (IPD)
empty
Study Protocol
empty
Statistical Analysis Plan
empty
Informed Consent Form
empty
Clinical Study Report
empty
Analytic Code
empty
Data Dictionary
empty