

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Effect of repeated lumbar traction by a door-mounted pull-up bar at home on the size and symptoms of herniated lumbar disc

Protocol summary

Summary

Objectives: Effect of repeated lumbar traction by a door-mounted pull-up bar at home on herniated lumbar disc and reduction of imposed expenses by physiotherapy
Design: Prospective randomized controlled trial
Setting and Conduct: 50 patients are included in the study according to the following criteria and then are separated into two groups, traction and the control group and the interventions are undertaken. **Participants:** Patients of K & B province referring to Yasuj Shahid Mofateh clinic due to disc herniation with the following criteria. **Inclusion criteria:** low back pain or sciatica due to lumbar disc herniation and L3-S1 radiculopathy; duration of pain less than 6 months; lumbar disc herniation verified by MRI; consistency in the pattern of pain complaint, neurological, and radiological findings; no history of previous physical therapy in the past; willing to take part in the study by signing a written informed consent. **Exclusion criteria:** low back pain due to neoplastic, inflammatory, infectious, or metabolic causes; indication of urgent surgery; spinal stenosis; pregnancy, postpartum period, and postoperative 3 months; previous vertebral surgery; LBP more than 6 months duration; gross structural abnormalities of vertebrae like listhesis; severe degenerative changes of spine; and intolerance of physical activity
Interventions: In the traction group traction by suspension from a pull-up bar is assigned in addition to the routine LBP medication for 2 months (25 times a day each time 40 sec). In the control group only the routine medications are prescribed for 2 months. **Main variables:** Two variables are evaluated. One of them is the size of herniated material measured by a specific index called "Herniation Index" by a "blind" examiner (radiologist), and the other one is VAS for evaluation of pain intensity.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2012120311654N1**

Registration date: **2013-02-27, 1391/12/09**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2013-02-27, 1391/12/09

Registrant information

Name

Mehdi khani

Name of organization / entity

Yasuj university of medical sciences

Country

Iran (Islamic Republic of)

Phone

+98 74 1223 1039

Email address

drmkhani@yahoo.com

Recruitment status

Recruitment complete

Funding source

Vice chancellor for Research, Yasuj university of medical sciences

Expected recruitment start date

2011-01-21, 1389/11/01

Expected recruitment end date

2012-10-22, 1391/08/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of repeated lumbar traction by a door-mounted

pull-up bar at home on the size and symptoms of herniated lumbar disc

Public title

Effect of pull-up bar exercise on disc herniation

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: low back pain or sciatica due to lumbar disc herniation and L3-S1 radiculopathy; duration of pain less than 6 months; lumbar disc herniation verified by MRI; consistency in the pattern of pain complaint, neurological, and radiological findings; no history of previous physical therapy in the past; willing to take part in the study by signing a written informed consent.

Exclusion criteria: low back pain due to neoplastic, inflammatory, infectious, or metabolic causes; indication of urgent surgery; spinal stenosis; pregnancy, postpartum period, and postoperative 3 months; previous vertebral surgery; gross structural abnormalities (e.g. spondylolisthesis); being unable to tolerate physical exercise due to cardiovascular reasons; presence of significant degenerative changes in lumbosacral vertebrae on X-rays; and duration of low back pain of more than 6 months.

Age

No age limit

Gender

Both

Phase

2-3

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**

Yasuj medical school Ethics committee for research

Street address

Yasuj university of medical sciences, Motahari avenue, Yasuj

City

Yasuj

Postal code**Approval date**

2011-11-21, 1390/08/30

Ethics committee reference number

90/8/30/4

Health conditions studied**1****Description of health condition studied**

Lumbar disc herniation

ICD-10 code

M51.2

ICD-10 code description

Lumbago due to displacement of intervertebral disc

Primary outcomes**1****Description**

size of herniated disc material

Timepoint

before intervention- 2 months after intervention

Method of measurement

Herniation Index

2**Description**

pain intensity

Timepoint

Before intervention- 2 months after intervention

Method of measurement

VAS

Secondary outcomes

empty

Intervention groups**1****Description**

50 patients who have the mentioned criteria will be admitted to the study with their signed consent. They are randomly divided in to two groups: the traction group and the control group. The traction group includes 25 patients and they are given a program of repeated lumbar traction by suspension from a pull up bar for 2 months (at least 25 times a day each time for 40 seconds) plus routine medication for disc herniation.

Category

Treatment - Other

2**Description**

The control group includes 25 patients and they are

given the routine medication (NSAID, Corticosteroids, Antispasmodics) without traction for a duration of 2 months.

Category

Treatment - Drugs

Recruitment centers**1****Recruitment center****Name of recruitment center**

Shahid Mofateh clinic

Full name of responsible person

Mehdi Khani

Street address

Montazeri avenue, Yasuj

City

Yasuj

Sponsors / Funding sources**1****Sponsor****Name of organization / entity**

Vice Chancellor for Research, Yasuj university of medical sciences

Full name of responsible person

Mr Negintaji

Street address

Vice Chancellor for Research, Yasuj university of medical sciences, Motahari avenue, Yasuj

City

Yasuj

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, Yasuj 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**

Yasuj university of medical sciences

Full name of responsible person

Mehdi Khani

Position

neurosurgeon

Other areas of specialty/work**Street address**

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Fax**Email****Web page address****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