# Clinical Trial Protocol
# Iranian Registry of Clinical Trials

07 Nov 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**

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Mr Niknam's house, Sardar 2 alley, Montazeri st.

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## Person responsible for scientific inquiries

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## Person responsible for updating data

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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*