

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

The Effect of Eight weeks Aqua Stretch and Dynamic Neuro Muscular Stabilization on Pain, Disability and foot pressure distribution in Patients with Nonspecific Chronic Low Back Pain

Protocol summary

Study aim

The Effect of Eight weeks Aqua Stretch and Dynamic Neuro Muscular Stabilization on Pain, Disability and foot pressure distribution in Patients with Nonspecific Chronic Low Back Pain

Design

Random controlled trial, with control group, with parallel, two-way blind groups

Settings and conduct

The study, conducted at Razi University's Sports Rehabilitation Laboratory, will evaluate the randomized double-blind, double-blind, 52-year-old patients with non-specific chronic low back pain. Then, in three groups, dynamic neuromuscular exercises, aqua stretch and control will be included. After the intervention, the evaluations will be done again

Participants/Inclusion and exclusion criteria

Age 30 to 50 years with chronic non-specific low back pain for three months or more and OSWESTRY score of 20 to 61, visual acuity pain (VAS) between 3 and 8, no surgical intervention, no damage, especially in Low back pain, lack of pregnancy, lack of exercise therapy at least 6 months before the study. Also, people with bone fractures, duct stenosis, vertebral fractures, a history of back surgery, inflammatory joint disease during pregnancy or less than 6 months after delivery

Intervention groups

Group 1: Dynamic neuromuscular stabilization exercises for 8 weeks and 3 sessions per week Group 2: Aqua stretching exercises for eight weeks and 3 sessions per week Third group: control group that Receive correct and preventive posture training on spine pressure online in cyberspace.

Main outcome variables

Pain and disability, center of pressure, balance, lumbopelvic control, spinal posture

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20200704048002N1**

Registration date: **2020-08-03, 1399/05/13**

Registration timing: **prospective**

Last update: **2020-08-03, 1399/05/13**

Update count: **0**

Registration date

2020-08-03, 1399/05/13

Registrant information

Name

behnoosh najafi

Name of organization / entity

Razi university

Country

Iran (Islamic Republic of)

Phone

+98 83 3428 3227

Email address

behnushnajafi106@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2020-08-22, 1399/06/01

Expected recruitment end date

2020-10-22, 1399/08/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The Effect of Eight weeks Aqua Stretch and Dynamic Neuro Muscular Stabilization on Pain, Disability and foot pressure distribution in Patients with Nonspecific Chronic Low Back Pain

Public title

The Effect of Eight weeks Aqua Stretch and Dynamic Neuro Muscular Stabilization on Pain, Disability and foot pressure distribution in Patients with Nonspecific Chronic Low Back Pain

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria:

with chronic non-specific low back pain for three months or more 30 to 50 years of age the OSWESTRY score of 20 to 61 visual acuity pain (VAS) between 3 and 8

Exclusion criteria:

No surgery no back injury no pregnancy, pregnancy or less than 6 months after delivery no exercise at least 6 months before the test bone fractures history of back surgery

Age

From **30 years** old to **50 years** old

Gender

Female

Phase

N/A

Groups that have been masked

- Participant
- Investigator

Sample size

Target sample size: **52**

Randomization (investigator's opinion)

Randomized

Randomization description

Using random number generator software, the subjects will be assigned to three groups of physical exercises and control, and this process of number distribution will be performed by the software in a completely random manner. The evaluator is not aware of this random allocation and after evaluating each patient, they will be given a number from 1 to 52 and after evaluating, they will take their number envelope and it will be determined in which group they will be placed.

Blinding (investigator's opinion)

Double blinded

Blinding description

Subjects will be hidden using the SNOSE method of allocating subjects. In this way, the allocation sheet will be given to a non-involved person in the research and after evaluating each person, it will be announced in which group they will be placed. To blind the subjects, we will also give an educational intervention to the control group, which once a week will give ergonomic principles to the control group online in cyberspace to prevent mechanical pressures on the spine.

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

کمیته اخلاق در پژوهش دانشگاه رازی کرمانشاه

Street address

bag abrisham

City

kermanshah

Province

Kermanshah

Postal code

6714414874

Approval date

2020-06-02, 1399/03/13

Ethics committee reference number

IR.RAZI.REC.1399.005

Health conditions studied

1

Description of health condition studied

Non-specific back pain

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Pain

Timepoint

Before the start of the intervention and one day after the end of the intervention

Method of measurement

pain with visual analog scale(VAS)

2

Description

disability

Timepoint

Before the start of the intervention and one day after the end of the intervention

Method of measurement

Disability with OSWESTRY

Secondary outcomes

1

Description

lumbopelvic control, balance, center of pressure,

Timepoint

Before the start of the intervention and one day after the end of the intervention

Method of measurement

Laboratory

Intervention groups

1

Description

Intervention group1: Eight weeks 3 sessions each week and 1 hour each session of dynamic neuromuscular stabilization exercises

Category

Rehabilitation

2

Description

Intervention group2: 8 weeks and 3 sessions per week and 1 hour of aqua stretching exercises for each session

Category

Rehabilitation

3

Description

Control group: The control group we will give an educational intervention that once a week in cyberspace, the control group will be given ergonomic training to prevent mechanical stress on the spine.

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Razi University Sports Science Laboratory

Full name of responsible person

behnush najafi

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

razi university

Full name of responsible person

farzad vysi

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Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

razi university

Proportion provided by this source

10

Public or private sector

Public

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

Academic

Person responsible for general inquiries

Contact

Name of organization / entity

razi university

Full name of responsible person

behnush najafi

Position

student

Latest degree

Master

Other areas of specialty/work

sport injury/corrective exercise

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Full name of responsible person

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Position

student

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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD

There is not much information

Study Protocol

No - There is not a plan to make this available

Statistical Analysis Plan

No - There is not a plan to make this available

Informed Consent Form

No - There is not a plan to make this available

Clinical Study Report

No - There is not a plan to make this available

Analytic Code

No - There is not a plan to make this available

Data Dictionary

No - There is not a plan to make this available