Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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 sterch 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

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bag abrisham

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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
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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
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Position
studen
Latest degree
Master
Other areas of specialty/work
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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