

Clinical Trial Protocol

Iranian Registry of Clinical Trials

05 Aug 2026

The Effect of Eight Weeks Pilates Exercises on Functional Movement, Pain and Quality of Life in Patients with Spondylolysis

Protocol summary

Central Part of Body; Range of Motion of Lumbar Spine;
Pain; Quality of Life

Study aim

The Effect of Eight Weeks Pilates Exercises on Functional Movement, Pain and Quality of Life in Patients with Spondylolysis

Design

Semi-experimental study with pretest and posttest design on patients with spondylolysis who were randomly selected and randomly divided into intervention and control groups

Settings and conduct

Patients in the intervention group performed Pilates exercises for 8 weeks, 3 weeks each and 60 minutes each session under the supervision of Pilates instructor. Also, for the reliability and assurance of the results of the evaluation of the subjects before and after eight weeks, the research tests The present was performed by a tester at a similar time of the day. Also, the test was unaware of which subject was placed (blind one way).

Participants/Inclusion and exclusion criteria

Individuals with spondylolysis and non-infectious diseases, tumors, rheumatoid diseases, osteoporosis, congenital anomalies of the spine, taking anti-inflammatory and analgesic drugs, were approved by a physician specialist in the neurological and neuropathology of the spine. The exercise program and treatment work outside the current research and the lack of regular participation in regular sessions and absence of more than three sessions in exercise therapy sessions, other therapeutic interventions and reluctance to continue cooperation in the research were criteria for withdrawal from studies..

Intervention groups

Experimental group for eight weeks, three session in a week, and each session 60 minutes performed selected Pilates exercises, but during these time control group did not participate in any treatment activity and performed normal daily activities.

Main outcome variables

Dynamic balance and Static; Muscular Endurance of the

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20181218042034N1**

Registration date: **2019-02-20, 1397/12/01**

Registration timing: **retrospective**

Last update: **2019-02-20, 1397/12/01**

Update count: **0**

Registration date

2019-02-20, 1397/12/01

Registrant information

Name

Saeid Jamali Brayjani

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 31 3684 3508

Email address

n.rahnama@sprt.ui.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2017-11-22, 1396/09/01

Expected recruitment end date

2018-04-21, 1397/02/01

Actual recruitment start date

2017-11-22, 1396/09/01

Actual recruitment end date

2018-04-21, 1397/02/01

Trial completion date

2018-08-23, 1397/06/01

Scientific title

The Effect of Eight Weeks Pilates Exercises on Functional Movement, Pain and Quality of Life in Patients with Spondylolysis

Public title

The Effect of Pilates Exercises in Patients with Spondylolysis

Purpose

Supportive

Inclusion/Exclusion criteria**Inclusion criteria:**

Patients with spondylolysis Diagnosis of the spines neuropsychologist diagnosis

Exclusion criteria:

Lack of infection Lack of tumor Lack of rheumatoid patients Lack of Osteoporosis Lack of congenital disorder Do not take anti-inflammation drugs and pain

Age

From **25 years** old to **50 years** old

Gender

Female

Phase

N/A

Groups that have been masked

- Outcome assessor
- Data analyser

Sample size

Target sample size: **20**

Actual sample size reached: **20**

Randomization (investigator's opinion)

Randomized

Randomization description

A simple random method was performed by a third person who did not have any information from the research so that the name and family of each subject were placed in similar envelopes without the content being specified and after the closing of the door the envelopes were requested from the person concerned. Envelope Equities placed in boxes A and B, without the third party's knowledge, Box A, the representative of the intervention group and the B-block control agent.

Blinding (investigator's opinion)

Single blinded

Blinding description

The examiner has been blinded to the extent to which the subjects (experimental or control) have been blinded to influence the way in which the test and results are conducted, as well as the subjects with full knowledge of the research and completion of the consent form for participation in a study Satisfied

Placebo

Not used

Assignment

Parallel

Other design features

Modality for the rehabilitation of spondylolysis

Secondary Ids

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Ethics Committee of Isfahan Islamic Azad University (Khorasgan)

Street address

University blvd-Arghavaniya-East gay street

City

Isfahan

Province

Isfahan

Postal code

۸۱۵۵۱-۳۹۹۹۸

Approval date

2018-12-26, 1397/10/05

Ethics committee reference number

IR.IAU.KHUISF.REC.1397.117

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

Spondylolysis

ICD-10 code

M43.0

ICD-10 code description

Spondylolysis

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

The effect of Pilates exercises on: 1-dynamic balance 2-static balance 3-muscular endurance of the central part of body 4- range of motion of lumbar spine 5- pain 6- quality of life in patients with spondylolysis

Timepoint

Before the intervention and 2 day after eight weeks of intervention

Method of measurement

1. Y test 2. Stork test 3. McGill test 4. Modified_Modified Schobers technique 5. visual analog scale VAS 6. quality of Life Questionnaire SF-36

Secondary outcomes

empty

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

Intervention group: Experimental group for eight weeks, three session in a week, and each session 60 minutes performed selected Pilates exercises

Category

Rehabilitation

2

Description

Control group: During this period (eight weeks), the control group did not participate in any kind of therapeutic activity and engaged in daily activities.

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

مطب دکتر

Full name of responsible person

دکتر سعید ابریشم کار

Street address

Chahar Bagh - Shari'ati Street - Facing Shariati Hospital - Faraz Building - First Floor - Unit 103

City

Isfahan

Province

Isfahan

Postal code

8145148916

Phone

+98 31 3233 0091

Email

abrishamkar@med.mui.ac.ir

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Islamic Azad University

Full name of responsible person

professor Majid Toghyani

Street address

Isfahan- East Azarbayjan-Arghavaniyeh- University Blvd.

City

Isfahan

Province

Isfahan

Postal code

۸۱۵۵۱-۳۹۹۹۸

Phone

+98 31 3535 4001

Email

info@khuisf.ac.ir

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Islamic Azad University

Proportion provided by this source

50

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

Iranian academic center for education culture and research

Full name of responsible person

Nader Rahnama

Position

Full Professor, Faculty Member of Isfahan University

Latest degree

Ph.D.

Other areas of specialty/work

sport pathology

Street address

Isfahan, Azadi Square, Isfahan University

City

Isfahan

Province

Isfahan

Postal code

۸۱۷۴۶۷۳۴۱

Phone

+98 31 3793 2195

Email

Rahnamanader@yahoo.com

Person responsible for scientific inquiries

Contact

Name of organization / entity

Iranian academic center for education culture and research

Full name of responsible person

Nader Rahnama

Position

Full Professor, Faculty Member of Isfahan University

Latest degree

Ph.D.

Other areas of specialty/work

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Street address

Isfahan, Azadi Square, Isfahan University

City

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Province

Isfahan

Postal code

۸۱۷۴۶۷۳۴۱

Phone

+98 31 3793 2195

Email

Rahnamanader@yahoo.com

Person responsible for updating data

Contact

Name of organization / entity

Iranian academic center for education culture and research

Full name of responsible person

Nader Rahnama

Position

Full professor of faculty member of Isfahan University (responsible author)

Latest degree

Ph.D.

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sport pathology

Street address

Isfahan, Azadi Square, Isfahan University

City

Isfahan

Province

Isfahan

Postal code

۸۱۷۴۶۷۳۴۱

Phone

+98 31 3793 2195

Email

Rahnamanader@yahoo.com

Sharing plan

Deidentified Individual Participant Data Set (IPD)

Yes - There is a plan to make this available

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

Yes - There is a plan to make this available

Informed Consent Form

Yes - There is a plan to make this available

Clinical Study Report

Yes - There is a plan to make this available

Analytic Code

Not applicable

Data Dictionary

Yes - There is a plan to make this available

Title and more details about the data/document

Unnamed participants' data, practice protocols, and data analysis, a form set up to satisfy the company's participation in research without the names of the participants, and the results of the research for other collaborative researchers.

When the data will become available and for how long

Start the access period from 1398

To whom data/document is available

Researchers working in academic institutions

Under which criteria data/document could be used

Use for Rehabilitation

From where data/document is obtainable

Email: Saidgamali655@gmail.com

What processes are involved for a request to access data/document

send mail

Comments