

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### The Effects of Pilates Exercise Following Total Hip Arthroplasty

#### Protocol summary

##### Summary

The purpose of the study: Impaired range of motion (ROM), muscular weakness, and decreased function are complications following total hip arthroplasty (THA). The aim of this study was to investigate the potential role of Pilates training method in addressing above-mentioned deficits in patients after THA. Inclusion criteria: The posterior approach of THA surgery on the right hip, passing a week of subacute stage interventions. Exclusion criteria: Remain in a state of acute and subacute after surgery. The sample size of the study population: The participants consisted of 38 male patients who had undergone hip arthroplasty. Intervention and time of the study: This study was done in 1393. Exercises designed for each patient based on his existing musculoskeletal problems and conflicts. The first group received traditional exercises after surgery THA, such as straight leg rise, bridging the supine position, hip adduction in a sitting position, hip abduction in the lateral position and hip extension in the prone position. for the second group, Pilates training was considered. It should be noted that there was not any ban from the specialist regarding training for all subjects. Primary outcomes: The Pilates was more effective than traditional exercises in pain improvement, function, and hip joint flexion range of motion.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT2017050933772N2**  
Registration date: **2017-06-09, 1396/03/19**  
Registration timing: **retrospective**

Last update:

Update count: **0**

##### Registration date

2017-06-09, 1396/03/19

#### Registrant information

##### Name

Pouya Rabiei

##### Name of organization / entity

Islamic Azad University, Karaj Branch, karaj

##### Country

Iran (Islamic Republic of)

##### Phone

+98 918 361 1802

##### Email address

pouya.rabiei@kiau.ac.ir

#### Recruitment status

##### Recruitment complete

#### Funding source

Personal

#### Expected recruitment start date

2014-05-25, 1393/03/04

#### Expected recruitment end date

2014-07-03, 1393/04/12

#### Actual recruitment start date

empty

#### Actual recruitment end date

empty

#### Trial completion date

empty

#### Scientific title

The Effects of Pilates Exercise Following Total Hip Arthroplasty

#### Public title

Pilates-based Exercise after Total Hip Arthroplasty

#### Purpose

Treatment

#### Inclusion/Exclusion criteria

Inclusion criteria: The posterior approach of THA surgery on the right hip, passing a week of subacute stage interventions. Exclusion criteria: Remain in a state of acute and subacute after surgery.

#### Age

No age limit

**Gender**

Male

**Phase**

N/A

**Groups that have been masked***No information***Sample size**Target sample size: **38****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**

Tehran University of Medical Sciences

**Street address**

Tehran University, Enghelab Street

**City**

Tehran

**Postal code****Approval date**

2013-09-23, 1392/07/01

**Ethics committee reference number**

8-16/321

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

rehabilitation

**ICD-10 code**

Z50.1

**ICD-10 code description**

Other physical therapy

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

Pain intensity

**Timepoint**

at baseline, after receiving the interventions

**Method of measurement**

Visual Analogue Scale

**2****Description**

hip joint ROM

**Timepoint**

at baseline, after receiving the interventions

**Method of measurement**

Standard Goniometry

**3****Description**

lower extremity function

**Timepoint**

at baseline, after receiving the interventions

**Method of measurement**

Lower Extremity Functional Scale

**Secondary outcomes**

empty

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

Traditional training group exercises description: short arc quadriceps, straight leg raising, bridging the supine position, long arc quadriceps, hip adduction in a sitting position, hip abduction in the lateral position, hip extension in the prone position.

**Category**

Treatment - Drugs

**2****Description**

Pilates group training Description: Imprinting, bridging, Table Top circles, Single leg circles, Side lying kick series, Clams, bike

**Category**

Rehabilitation

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

Niki Physical Therapy Clinic

**Full name of responsible person**

Dr.Vahid Mazloum

**Street address**

Hafttir Street

**City**

karaj

## Sponsors / Funding sources

1

### Sponsor

**Name of organization / entity**

Personal

**Full name of responsible person**

Dr.vahid Mazloum

**Street address**

Niki Physical Therapy Clinic, Haftetir street

**City**

karaj

**Grant name**

**Grant code / Reference number**

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

Yes

**Title of funding source**

Personal

**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**

Islamic Azad University, Karaj Branch

**Full name of responsible person**

Pouya Rabiei

**Position**

Master of Sports Injury

**Other areas of specialty/work**

**Street address**

Islamic Azad University, Moazen Street, karaj

**City**

karaj

**Postal code**

**Phone**

+98 26 3332 8280

**Fax**

**Email**

pouya\_rabiei@yahoo.com

**Web page address**

## Person responsible for scientific inquiries

### Contact

**Name of organization / entity**

Islamic Azad University, Karaj Branch

**Full name of responsible person**

Vahid Mazloum

**Position**

PhD

**Other areas of specialty/work**

**Street address**

Niki Physical Therapy Clinic, Haftetir Street, karaj

**City**

Karaj

**Postal code**

**Phone**

+98 26 3332 8280

**Fax**

**Email**

vahid.mazloum@yahoo.com

**Web page address**

## Person responsible for updating data

### Contact

**Name of organization / entity**

Islamic Azad University, Karaj Branch

**Full name of responsible person**

Pouya Rabiei

**Position**

Master of Sports Injury

**Other areas of specialty/work**

**Street address**

Islamic Azad University Karaj Branch. Moazen Street

**City**

karaj

**Postal code**

**Phone**

+98 26 3332 8280

**Fax**

**Email**

pouya\_rabiei@yahoo.com

**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*