Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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

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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
Haftetir Street
City
karaj

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Personal
Full name of responsible person
Dr.vahid Mazloum
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Niki Physical Therapy Clinic, Haftetir street
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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
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

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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