

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Effectiveness of 4-weeks home based flexibility and resistance exercise program on structural profile and the shoulder girdle function for women with breast cancer

Protocol summary

Summary

Objective: Structural Profile and Shoulder Girdle Function in Breast Cancer Survivors: Effect of Home-Based Exercise Program Study design: Randomized, Double blind, with control group (no intervention) Study population: women with breast cancer referred cancer treatment centers in Isfahan Inclusion and Exclusion criteria: Postmenopausal Women; Age: 45-65; Diagnosed with stage I-III breast cancer; Undergone Unilateral Modified Radical Mastectomy, at least 12 months before; Radiotherapy and chemotherapy has been completed, underwent hormone therapy at the time of study; No new record for torso, chest or neck musculoskeletal rehabilitation, six months before breast cancer diagnosis; No regular exercise or fewer than two exercise sessions per weeks, at last 6 months. Sample: n=80 Interventions: a resistance exercise with therapeutic band and flexibility exercise at home. Duration of intervention: 4 weeks, 4 days per week The primary outcomes: shoulder girdle posture, strength, flexibility & function improvement

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2013052213432N1**
Registration date: **2014-03-11, 1392/12/20**
Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2014-03-11, 1392/12/20

Registrant information

Name

Mahdie Akoochakian

Name of organization / entity

University of Tehran

Country

Iran (Islamic Republic of)

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+98 76 4443 0055

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Recruitment status

Recruitment complete

Funding source

University of Tehran

Expected recruitment start date

2013-07-23, 1392/05/01

Expected recruitment end date

2013-09-23, 1392/07/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effectiveness of 4-weeks home based flexibility and resistance exercise program on structural profile and the shoulder girdle function for women with breast cancer

Public title

Effect of Home Based Exercise Programme on posture, Shoulder Girdle Strength, Flexibility & Function in Breast cancer Survivors

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria: Women, Age: 40-65; Diagnosed with stage I-III breast cancer; Underwent radical mastectomy

, at least 12 months before; Radiotherapy and chemotherapy has been completed, Underwent hormone therapy at the time of study; No new record Rehabilitation torso, Chest or neck musculoskeletal rehabilitation, six months before breast cancer diagnosis; No neurological, muscular dysfunction or taking drugs that may affect the neuromuscular function; No distant metastases; Sedentary lifestyle (no regular exercise or fewer than two exercise sessions per week); Exclusion criteria: Uncontrolled hypertension; Congestive heart failure; Pulmonary disease, diabetes, and thyroid or musculoskeletal disease

Age

From **40 years** old to **65 years** old

Gender

Female

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **80**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

semi - Experimental Research

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

University of Tehran

Street address

Department of sport science, University of Tehran,
Kish International Campus, Mirmohana Boulevard,
Kish Island

City

Kish

Postal code

Approval date

2012-12-05, 1391/09/15

Ethics committee reference number

15/9/1391

Health conditions studied

1

Description of health condition studied

Malignant neoplasm of breast

ICD-10 code

C50.0

ICD-10 code description

Nipple and areola

2

Description of health condition studied

Malignant neoplasm of breast

ICD-10 code

C50.1

ICD-10 code description

Central portion of breast

3

Description of health condition studied

Malignant neoplasm of breast

ICD-10 code

C50.2

ICD-10 code description

Upper-inner quadrant of breast

4

Description of health condition studied

Malignant neoplasm of breast

ICD-10 code

C50.3

ICD-10 code description

Lower-inner quadrant of breast

5

Description of health condition studied

Malignant neoplasm of breast

ICD-10 code

C50.4

ICD-10 code description

Upper-outer quadrant of breast

6

Description of health condition studied

Malignant neoplasm of breast

ICD-10 code

C50.5

ICD-10 code description

Lower-outer quadrant of breast

7

Description of health condition studied

Malignant neoplasm of breast

ICD-10 code

C50.6

ICD-10 code description

Axillary tail of breast

8

Description of health condition studied

Malignant neoplasm of breast

ICD-10 code

C50.8

ICD-10 code description

Overlapping lesion of breast

9

Description of health condition studied

Malignant neoplasm of breast

ICD-10 code

C50.9

ICD-10 code description

Breast, unspecified

Primary outcomes

1

Description

body posture

Timepoint

before intervention, one month after

Method of measurement

photography

2

Description

shoulder strength

Timepoint

before intervention, one month after

Method of measurement

lafayet manual muscle testing system

3

Description

shoulder range of motion

Timepoint

before intervention, one month after

Method of measurement

inclinometer

4

Description

shoulder function

Timepoint

before intervention, one month after

Method of measurement

DASH and PSS questioner

Secondary outcomes

1

Description

fatigue

Timepoint

before intervention, one month after

Method of measurement

piper fatigue questioner

2

Description

quality of life

Timepoint

before intervention, one month after

Method of measurement

cancer rehabilitation evaluation system short form (CARES-SF)

Intervention groups

1

Description

intervention.4 weeks home based mobility and resistance exercises (4 sessions per week)

Category

Rehabilitation

2

Description

the control group receives no intervention except routine cares

Category

N/A

Recruitment centers

1

Recruitment center

Name of recruitment center

Cancer Prevention Research Center, Isfahan Seyedolshohada Hospital, Isfahan University of Medical Sc

Full name of responsible person

Dr Faranak Parastegari

Street address

Next To Seyedolshohada Hospital, Alley Farshady Creek, The Khayyam Highway, Shiry Bridge, Isfahan.

City

Isfahan

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

University of Tehran

Full name of responsible person

Dr hossein rajabi

Street address

Department of Sport Sciences, Kish International Campus, University of Tehran, Kish Island

City

Kish Island

Grant name

Grant code / Reference number

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

Yes

Title of funding source

University of Tehran

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

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Full name of responsible person

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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