Clinical Trial Protocol
Iranian Registry of Clinical Trials

09 Nov 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 bind, 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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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 Programe on posture,Shoulder Girdle Strength, Flexibility & Function in Breast cancer Survivours

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
berfore intervention, one month after
Method of measurement
photography

2

Description
shoulder strength
Timepoint
berfore intervention, one month after
Method of measurement
lafayyet manual muscle testing system

3

Description
shoulder range of motion
Timepoint
berfore intervention, one month after
Method of measurement
inclinometer

4

Description
shoulder function
Timepoint
berfore intervention, one month after
Method of measurement
DASH and PSS qustioner

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

Name of organization / entity

University of Tehran

Full name of responsible person

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Other areas of specialty/work

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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