

Clinical Trial Protocol

Iranian Registry of Clinical Trials

03 Jun 2026

Effect of 6 Weeks of Low-volume High-Intensity Interval Training versus Moderate-Intensity Continuous Aerobic Exercise Training on Serum Malondialdehyde Level, Total Antioxidant Capacity and Aerobic Power in Breast Cancer Survivors

Protocol summary

Summary

The primary objective of this study was to evaluate the effect of a 6 week period of interval and continuous exercise on immune factors in breast cancer patients. Subjects consisted of 45 female patients with breast cancer between the ages of 40 to 49 years and are undergoing hormone therapy. Patients were randomly allocated to one of two exercise arm or control arm fall. Exercise training three days a week for 6 weeks is done. The control group do not exercise. At the beginning and end of the period, blood samples were taken to measure safety factors. Factors considered include changes in serum levels of total antioxidative capacity and malondialdehyde. Aerobic capacity is calculated with the formula.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016040327194N1**
Registration date: **2016-05-06, 1395/02/17**
Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2016-05-06, 1395/02/17

Registrant information

Name

Samira Emadi Andani

Name of organization / entity

University of Shahrekord

Country

Iran (Islamic Republic of)

Phone

+98 913 475 9066

Email address

emadisamera1@gmail.com

Recruitment status

Recruitment complete

Funding source

Researcher and University of Shahrekord

Expected recruitment start date

2015-11-28, 1394/09/07

Expected recruitment end date

2016-01-10, 1394/10/20

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of 6 Weeks of Low-volume High-Intensity Interval Training versus Moderate-Intensity Continuous Aerobic Exercise Training on Serum Malondialdehyde Level, Total Antioxidant Capacity and Aerobic Power in Breast Cancer Survivors

Public title

Cancer and Interval and Continuous Exercise Training

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria: Gender (Female), The participants are currently undergoing drug therapy(Tamoxifen); In the last 6 months have not participated in any regular exercise program; myocardial infarction, arrhythmias uncontrolled and extreme pressure (treated), do not

have. Exclusion criteria: Absence of more than 2 sessions of 18 session; Recognition of the need to exclude health; personal desire to withdraw from the study; susceptibility to other diseases; accidents and the factors that cause the participants can participate in training sessions.

Age

From **40 years** old to **49 years** old

Gender

Female

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **45**

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

University of Shahrekord

Street address

University of Shahrekord, Shahrekord

City

Shahrekord

Postal code

Group of Exercise ph

Approval date

2015-11-22, 1394/09/01

Ethics committee reference number

140/2735

Health conditions studied

1

Description of health condition studied

Breast cancer

ICD-10 code

C50.6

ICD-10 code description

Axillary tail of breast

Primary outcomes

1

Description

Malondialdehyde

Timepoint

Before and after 6 weeks exercise

Method of measurement

Using an ELISA kit

2

Description

Toal antioxidant capacity

Timepoint

Before and after 6 weeks exercise

Method of measurement

Using an ELISA kit

3

Description

Aerobic power

Timepoint

Before and after 6 weeks exercise

Method of measurement

Formula

Secondary outcomes

1

Description

Body fat percentage, Functional capacity

Timepoint

Before and after 6 weeks exercise

Method of measurement

Using calipers-formula Jackson, Test 6MWT

Intervention groups

1

Description

Six weeks interval exercise training for the experimental group

Category

Other

2

Description

Six weeks continuous exercise for the experimental group

Category

Other

3

Description

Use standard treatment control group

Category

Treatment - Drugs

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

Hospital Seyed Al Shohada

Full name of responsible person

Hemmati Simin

Street address

Group of oncology, Motahari street, Seyed Al Shohada Hospital, Esfahan

City

Esfahan

Sponsors / Funding sources**1****Sponsor****Name of organization / entity**

Researcher

Full name of responsible person

Emadi Andani Samira

Street address

Esfahan

City

Esfahan

Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

Researcher

Proportion provided by this source**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***2****Sponsor****Name of organization / entity**

University of Shahrekord

Full name of responsible person

Research deputy of University of Shahrekord

Street address

University of Shahrekord, Shahrekord

City

Shahrekord

Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

University of Shahrekord

Proportion provided by this source**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 Shahrekord

Full name of responsible person

Emadi Samira

Position

Master of Exercise Physiology

Other areas of specialty/work**Street address**

University of Shahrekord, Shahrekord

City

Shahrekord

Postal code

003832324435

Phone

003832324435

Fax**Email**

emadisamera1@gmail.com

Web page address**Person responsible for scientific inquiries****Contact****Name of organization / entity**

University of Shahrekord

Full name of responsible person

Azamian Jazee Akbar

Position

Associate Professor of Exercise Physiology

Other areas of specialty/work**Street address**

Shahrekord, University of Shahrekord

City

Shahrekord

Postal code**Phone**

+98 38323244017

Fax**Email**

azamianakbar@yahoo.comazamian-a@lit.sku.ac.ir

Web page address

Person responsible for updating data

Contact

Name of organization / entity

University of Shahrekord

Full name of responsible person

Emadi Samira

Position

Master of Exercise Physiology

Other areas of specialty/work**Street address**

University of Shahrekord, Shahrekord

City

Shahrekord

Postal code**Phone****Fax****Email**

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