Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

The effect of a long-term period interval and continuous exercise on some markers and inflammatory cytokines in breast cancer survivors

Protocol summary

Study aim
The effect of a long-term period interval and continuous exercise on some markers and inflammatory cytokines in breast cancer survivors

Design
45 women breast cancer survivors will be randomly divided into three groups (high intensity interval training, moderate intensity continuous training, and control). Each group will perform its own training protocol. Pre-test and post-test blood samples will be taken from the subjects to measure biochemical values.

Settings and conduct
The location of the research will be Tehran and the Laboratory of Sport Physiology.

Participants/Inclusion and exclusion criteria
Inclusion criteria:1. A definitive diagnosis of cancer and a history of cancer based on medical records 2. Exposure to stage one, two or three diseases and completion of treatment courses (Breast Removal Surgery, Chemotherapy, Radiotherapy) at least in the last 6 months 3.Menopause 4.Body mass index more than 25 kg/m2 5.Body fat more than 30%. Exclusion criteria:1.Cardiovascular disease 2.Diabetes 3.Thyroid diseases 4.smoking

Intervention groups
Control, high intensity interval training, moderate intensity continuous training

Main outcome variables
Effect of high intensity interval training and moderate intensity continuous training on IL-8؛ Leptin؛ Adiponectin؛ IGF-1؛ IGFBP-3؛ TAC؛ MDA؛ OHdG-8

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20190731044398N2**
Registration date: **2019-09-05, 1398/06/14**
Registration timing: **registered_while_recruiting**

Last update: **2019-09-05, 1398/06/14**
Update count: **0**

Registration date
2019-09-05, 1398/06/14

Registrant information

Name
Babak Hooshmand Moghadam

Name of organization / entity
Ferdowsi University of Mashhad

Country
Iran (Islamic Republic of)

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+98 51 3881 0540

Email address
babak.hooshmand@mail.um.ac.ir

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2019-08-23, 1398/06/01

Expected recruitment end date
2019-11-22, 1398/09/01

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
The effect of a long-term period interval and continuous exercise on some markers and inflammatory cytokines in breast cancer survivors

Public title
The effect of a long-term period interval and continuous

exercise on some markers and inflammatory cytokines in breast cancer survivors

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria:

A definitive diagnosis of cancer and a history of cancer based on medical records. Exposure to stage one, two or three diseases and completion of treatment courses (Breast Removal Surgery, Chemotherapy, Radiotherapy) at least in the last 6 months Menopause Body mass index more than 25 kg/m2 Body fat more than 30%

Exclusion criteria:

Cardiovascular disease Diabetes Thyroid diseases smoking

Age

No age limit

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

Randomization method: Simple randomization, randomization unit: individual, randomization tool: random number table

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

Research Ethics Committee of Physical Education and Sport Sciences

Street address

impasse 5, district 7, Tehran, Iran

City

Tehran

Province

Tehran

Postal code

1587958711

Approval date

2019-07-01, 1398/04/10

Ethics committee reference number

IR.SSRI.REC.1398.055

Health conditions studied

1

Description of health condition studied

Breast cancer

ICD-10 code

C50

ICD-10 code description

Malignant neoplasm of breast

Primary outcomes

1

Description

Serum levels of IL-8

Timepoint

Before and after intervention

Method of measurement

Blood sampling and using ELISA method

2

Description

Serum levels of Leptin

Timepoint

Before and after intervention

Method of measurement

Blood sampling and using ELISA method

3

Description

Serum levels of Adiponectin

Timepoint

Before and after intervention

Method of measurement

Blood sampling and using ELISA method

4

Description

Serum levels of IGF-1

Timepoint

Before and after intervention

Method of measurement

Blood sampling and using ELISA method

5

Description

Serum levels of IGFBP-3

Timepoint

Before and after intervention

Method of measurement

Blood sampling and using ELISA method

6

Description
Serum levels of TAC
Timepoint
Before and after intervention
Method of measurement
Blood sampling and using ELISA method

7

Description
Serum levels of MDA
Timepoint
Before and after intervention
Method of measurement
Blood sampling and using ELISA method

8

Description
Serum levels of 8-OHdG
Timepoint
Before and after intervention
Method of measurement
Blood sampling and using ELISA method

Secondary outcomes

empty

Intervention groups

1

Description
high intensity interval training group: During the study, this group will perform high intensity interval training for 12 weeks and 3 weeks each week.
Category
Rehabilitation

2

Description
moderate intensity continuous training group: During the study, this group will perform moderate intensity continuous training for 12 weeks and 3 weeks each week.
Category
Rehabilitation

3

Description
Control group: During the study, this group will not perform any exercise.
Category
Lifestyle

Recruitment centers

1

Recruitment center
Name of recruitment center
Private
Full name of responsible person
Babak Hooshmand Hoghadam
Street address
Faculty of Physical Education and Sport Science of Tehran University, Northern Kargar Ave, Tehran, Iran
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Sponsors / Funding sources

1

Sponsor
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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
Private
Proportion provided by this source
100
Public or private sector
Private
Domestic or foreign origin
Domestic
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
Persons

Person responsible for general inquiries

Contact

Name of organization / entity
University of Tehran

Full name of responsible person
Parisa Pournemati

Position
Assistant Professor

Latest degree
Ph.D.

Other areas of specialty/work
Physiology

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Yes - There is a plan to make this available

Study Protocol
No - There is not a plan to make this available

Statistical Analysis Plan
Not applicable

Informed Consent Form
Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report
Yes - There is a plan to make this available

Analytic Code
Not applicable

Data Dictionary
Not applicable

Title and more details about the data/document
Personal information of patients is confidential. But access to the research method and the information obtained from the research is not a problem

When the data will become available and for how long
After printing in a journal

To whom data/document is available
All students and enthusiasts

Under which criteria data/document could be used
In order to use data to carry out research work in this area

From where data/document is obtainable
The authors of this article b.hooshmand.m@gmail.com

What processes are involved for a request to access data/document
By sending email the author will work with the applicant as soon as possible

Comments