

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Effect of Acupuncture on body weight and antibody titers against Heat Shock Protein, 27, 60, 65 and 70 in Iranian obese

Protocol summary

Summary

Obesity and overweight are increasing because of increased incidence of many diseases such as coronary heart disease. The effect of heat shock proteins in cardiovascular disease has been confirmed. Therefore, simple check-off treatments like acupuncture treatment of obesity while reducing cardiovascular risk factors is important. Participants, male and female aged between 16 to 60, BMI>25, without drug history and Heart disease, (n=550), were randomized to therapeutic body acupuncture, auricular acupuncture, sham groups (sham body and auricular acupuncture) and control group just with low calorie diet. Subjects received authentic (cases) or sham acupuncture and control for 6-weeks (first-period) in combination with a low-calorie diet. In the next 6-week (second-period), the low-calorie diet was used on its own. Subjects were assessed at the beginning, 6 and 12 weeks later. In addition to anthropometric and lipid parameters, serum anti-heat shock protein (Hsp)-27, 60, 65, 70 and high sensitive C-reactive protein (hs-CRP) levels were assessed.

General information

Acronym

Effect of Acupuncture on body weight and antibody titers against Heat Shock Protein

IRCT registration information

IRCT registration number: **IRCT201201127117N2**

Registration date: **2012-01-17, 1390/10/27**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2012-01-17, 1390/10/27

Registrant information

Name

Majid Ghayour Mobarhan

Name of organization / entity

Mashhad University of Medical Sciences,

Country

Iran (Islamic Republic of)

Phone

+98 51 1822 8573

Email address

ghayourm@mums.ac.ir

Recruitment status

Recruitment complete

Funding source

Mashhad University of Medical Sciences

Expected recruitment start date

2009-09-23, 1388/07/01

Expected recruitment end date

2011-09-23, 1390/07/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of Acupuncture on body weight and antibody titers against Heat Shock Protein, 27, 60, 65 and 70 in Iranian obese

Public title

Effect of Acupuncture on body weight and antibody titers against Heat Shock Protein, 27, 60, 65 and 70 in Iranian obese

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: subjects are eligible if they are completely healthy; male and female subjects; age between 16 to 60; BMI>25 and no medical or drug

history Exclusion criteria: Diabetes; sever hypertension; Heart disease (CHD, MI, Bypass); Pregnancy and age below 18 and above 60 years

Age

From **18 years** old to **60 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **550**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

Placebo

Used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Mashhad University of Medical Sciences Ethics Committee

Street address

Mashhad University of Medical Sciences

City

Mashhad

Postal code

Approval date

2009-09-23, 1388/07/01

Ethics committee reference number

86058

Health conditions studied

1

Description of health condition studied

obesity and overweight

ICD-10 code

E66.9

ICD-10 code description

Primary outcomes

1

Description

Weight

Timepoint

Before treatment. 1/5 month after treatment and 1/5 month after stoping the threatment

Method of measurement

Bioimpedanses

2

Description

Body mass index

Timepoint

Before treatment. 1/5 month after treatment and 1/5 month after stoping the threatment

Method of measurement

Bioimpedanses

3

Description

Waist and hip circumference

Timepoint

Before treatment. 1/5 month after treatment and 1/5 month after stoping the threatment

Method of measurement

Meter

Secondary outcomes

1

Description

Biochemistry factors

Timepoint

Before intervention, 1.5 month after and 1.5 month after the end of treatment

Method of measurement

Auto analyser

2

Description

Heat Shock Protein 27,60, 65 and 70

Timepoint

Before intervention, 1.5 month after and 1.5 month after the end of treatment

Method of measurement

ELISA

Intervention groups

1

Description

110 obese people with low calorie diet

Category

Other

2

Description

110 obese people with low calorie diet + body acupuncture

Category

Treatment - Drugs

3

Description

110 obese people with low calorie diet + sham body acupuncture

Category

Placebo

4

Description

110 obese people with low calorie diet + auricular acupuncture

Category

Treatment - Drugs

5

Description

110 obese people with low calorie diet + sham auricular acupuncture

Category

Placebo

Recruitment centers

1

Recruitment center

Name of recruitment center

Nutrition clinic, Ghaem hospital, Mashhad.

Full name of responsible person

Street address

City

Mashhad

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Mashhad University of Medical Sciences

Full name of responsible person

jalil tavakol afshar

Street address

Park squer- Medical university

City

Mashhad

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Mashhad University of Medical Sciences

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

Mashhad University of Medical Sciences

Full name of responsible person

Majid Ghayour Mobarhan

Position

MD

Other areas of specialty/work

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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