Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 2026

Plasma levels of leptine and growth hormone after auricular and body electro acupuncture combine with low calorie diet for weight reduction in patients.

Protocol summary

Summary

Obesity is now one of the problems of human society. This treatment is safe, cheap, easy, and scientific and because of this, embraced by all communities. In some studies, has been said that in addition to the effects of acupuncture on weight loss, it will effect on the appetite. Our study is to explore the mechanism of acupuncture on the human appetite control. leptin is an important and effective hormone in appetite control. Also recently has been reported that the appetite-enhancing hormone (Grlyn) increases the secretion of growth hormone. The purpose of this study is to show the mechanism of acupuncture on the human appetite by affecting the levels of leptin and growth hormone (GH). We examine this type of treatment in hormone levels of leptin and human growth hormone. The effectiveness of this therapy in obese patients, cause they do not need expensive medications. This study conducted on overweight and obese persons of both genders, aged between 18-60 years with BMI>25 kg/m2 and who had medical history without drug history. The subjects were randomly divided to groups A (treated with low calorie diet) and B (treated with electro acupuncture and low calorie diet), C (placebo electro acupuncture with low calorie diet), D (treated with auricular acupuncture and low calorie diet) and E (placebo auricular acupuncture with low calorie diet). Body weight, BMI, body and trunk fat mass and fasting blood samples were measured. For measurement complete blood count, highly sensitive C-reactive protein (hs-CRP), creatinine and leptin and growth hormone for three times in all subjects, first; at the beginning of study, second; one day after treatment and third; 45 days after treatment.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201107267117N1**
Registration date: **2011-12-04, 1390/09/13**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2011-12-04, 1390/09/13

Registrant information

Name
Majid Ghayour Mobarhan
Name of organization / entity
Mashhad University of Medical Sciences,
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Recruitment status

Recruitment complete

Funding source

Shiraz and Mashhad Universities of Medical Sciences

Expected recruitment start date

2010-09-30, 1389/07/08

Expected recruitment end date

2011-01-28, 1389/11/08

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Plasma levels of leptine and growth hormone after auricular and body electro acupuncture combine with low calorie diet for weight reduction in patients.

Public title
Plasma levels of leptine and growth hormone after auricular and body electro acupuncture combine with low calorie diet for weight reduction in patients.
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria: obese men and women; age between 18 to 50 without any history of illness. Exclusion criteria: Diabetes; sever hypertension; cardiac disease; endocrine abnormalities and women who were in gestation and lactation periods.
Age
From **18 years** old to **50 years** old
Gender
Both

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **250**
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
Shiraz University of Medical Sciences
Street address
Shiraz- emam hosein square- medical scinces university
City
Shiraz
Postal code
Approval date
2010-09-30, 1389/07/08
Ethics committee reference number
CT-88-4750

Health conditions studied

1

Description of health condition studied
Obesity and overweight
ICD-10 code
E66.9
ICD-10 code description
All neoplasms, whether functionally active or not, are classified in Chapter II. Appropriate codes in this chapter (i.e. E05.8, E07.0, E16-E31, E34.-) may be used, if desired, as additional codes to indicate either functional activity by neoplasms and ect

Primary outcomes

1

Description
Weight and BMI
Timepoint
1/5 months and 3 months after biging the study
Method of measurement
Body composition analyzer BC_418 (TANITA)

2

Description
Waist, hips, abdomen, ankles circumstance
Timepoint
1/5 months and 3 months after biging the study
Method of measurement
meter

3

Description
Blood pressure
Timepoint
1/5 months and 3 months after bigining the study
Method of measurement
Mercury pressure indicator

Secondary outcomes

1

Description
Leptin hormone and grouth hormone
Timepoint
1.5 month
Method of measurement
ELISA method

2

Description
Biochemical parameters
Timepoint
1.5 month
Method of measurement

Radioimmunoassay method

Intervention groups

1

Description
The first group consist of 50 over weight and obese subjects with low-calorie diet
Category
Other

2

Description
The second group consist of 50 over weight and obese subjects with low-calorie diet plus body electro acupuncture
Category
Treatment - Drugs

3

Description
The third group consist of 50 over weight and obese subjects with low-calorie diet plus sham body electro acupuncture
Category
Placebo

4

Description
The fourth group consist of 50 over weight and obese subjects with low-calorie diet plus auricular acupuncture
Category
Treatment - Drugs

5

Description
The fifth group consist of 50 over weight and obese subjects with low-calorie diet plus sham auricular acupuncture
Category
Placebo

Recruitment centers

1

Recruitment center
Name of recruitment center
Ghaem clinic
Full name of responsible person
Dr Majid Ghayour Mobarhan
Street address
Ahmadabad avenue
City
Mashhad

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Mashhad University of Medical Sciences
Full name of responsible person
Dr. Tavakkol
Street address
Deputy of Research of Mashhad University of Medical Sciences
City
Mashhhad
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
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
Shiraz University of Medical Scicences
Full name of responsible person
Dr. Hatam
Street address
Deputy of Research of Shiraz University of Medical Sciences
City
Shiraz
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Shiraz University of Medical Scicences
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
Mashhad University of Medical Scinces
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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