

Clinical Trial Protocol

Iranian Registry of Clinical Trials

04 Jun 2026

The effect of supplementation with *Ganoderma lucidum* on anthropometric indices, chemical biomarkers and blood pressure of people with overweight

Protocol summary

Study aim

the effect of *Ganoderma lucidum* supplementation on anthropometric indices, chemical biomarkers and blood pressure in overweight people

Design

A clinical trial with a control group, with a parallel, double-blind, randomized, phase 3 group on 72 patients, used the rand function of Excel software for randomization.

Settings and conduct

The study was performed in Salahuddin Ayoubi Hospital in Baneh. They were randomly divided into two groups of intervention and control. Patients who were eligible for the study were randomly divided into two groups of placebo and medicine. Whether the drug was a placebo or an intervention was unknown but the researcher was aware. Patients and drugs were coded by the researcher.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Age 60 to 18 years, personal satisfaction, Body mass index 25 to 29.9, no underlying diseases interfering with weight loss and drug use, use of any type of weight loss and fat or blood pressure monitor and blood sugar control, non-pregnancy and lactation. Exclusion criteria: taking Weight loss supplements, following a diet to lose weight, diseases associated with metabolic changes such as thyroid disease, taking drug that inhibit platelet aggregation (such as aspirin or warfarin), unavailability of any reason

Intervention groups

Intervention group: Patients received 3 capsules of *Ganoderma* daily, each capsule containing 220 mg of complete powder of *Ganoderma lucidum* and 30 mg of pure aqueous extract of *Ganoderma lucidum* for 6 weeks. Control group: Patients received 3 capsules daily, each containing 250 mg of wheat flour for 6 weeks.

Main outcome variables

Body mass index (BMI), weight, waist circumference, hip

circumference, waist to hip ratio, arm circumference, total cholesterol concentration, Low density lipoprotein (LDL), High density lipoprotein (HDL), triglyceride, blood sugar, blood pressure, Physical activity

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20150706023084N7**

Registration date: **2020-12-26, 1399/10/06**

Registration timing: **retrospective**

Last update: **2020-12-26, 1399/10/06**

Update count: **0**

Registration date

2020-12-26, 1399/10/06

Registrant information

Name

MARYAM SHIEHMORTEZA

Name of organization / entity

AZAD UNIVERSITY PHARMACEUTICAL SCIENCES

Country

Iran (Islamic Republic of)

Phone

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2020-06-05, 1399/03/16

Expected recruitment end date

2020-07-18, 1399/04/28

Actual recruitment start date

2020-06-05, 1399/03/16

Actual recruitment end date

2020-07-24, 1399/05/03

Trial completion date

2020-07-24, 1399/05/03

Scientific title

The effect of supplementation with Ganoderma lucidum on anthropometric indices, chemical biomarkers and blood pressure of people with overweight

Public title

The effect of Ganoderma lucidum on weight and chemical biomarkers and blood pressure in overweight people

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

Having an age of 18-60 years personal satisfaction BMI between 29.9-25 no underlying diseases interfering with weight loss and drug use taking any type of weight loss and fat or blood pressure monitor and blood sugar controller no pregnancy And breastfeeding

Exclusion criteria:

Taking weight loss supplements following a diet to lose weight diseases related to metabolic changes such as thyroid disease pregnancy and lactation, taking drugs that inhibit platelet aggregation (such as aspirin or warfarin) due to drug interactions unavailability of any a reason

Age

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

Gender

Both

Phase

3

Groups that have been masked

- Participant
- Care provider
- Outcome assessor
- Data analyser

Sample size

Target sample size: **60**

Actual sample size reached: **72**

Randomization (investigator's opinion)

Randomized

Randomization description

Sampling was done by simple random sampling so that 72 people were selected using a random table of numbers and randomly assigned by random numbers by random numbers in Exel software were divided into two groups of intervention and control (default: numbers Pairs in Ganoderma supplement group = intervention group and individual numbers in group of capsules filled with wheat flour = in control group)

Blinding (investigator's opinion)

Double blinded

Blinding description

All patients who were eligible for the study were

randomly divided into placebo and drug groups. Patients and laboratory staff and physicians were unaware of the intervention drug or placebo. But the researcher knew whether the intervention was drug or placebo. And the drugs were coded by the researcher. The dressing was such that the placebo was the same shape, color, and taste of the drug. That is, the drug and the placebo were both similar in appearance. But the placebo capsules contained wheat flour.

Placebo

Used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Ethics Committee of Islamic Azad University of Medical Sciences, Tehran

Street address

Paint Factory Deadlock, Attari Moghadam St , Shahid Khaghani St , Islamic Azad University of Tehran Medical Branch , Research Office

City

TEHRAN

Province

Tehran

Postal code

1958

Approval date

2020-06-28, 1399/04/08

Ethics committee reference number

IR.IAU.PS.REC.1399.151

Health conditions studied**1****Description of health condition studied**

overweight

ICD-10 code**ICD-10 code description****Primary outcomes****1****Description**

Body mass index (BMI)

Timepoint

Before the start of the study and 42 days after starting to take Ganoderma capsules

Method of measurement

math formula

2

Description

Weight

Timepoint

Before the start of the study and 42 days after starting to take Ganoderma capsules

Method of measurement

digital Balance

3

Description

Arm circumference

Timepoint

Before the start of the study and 42 days after starting to take Ganoderma capsules

Method of measurement

Tape meter

4

Description

Hip circumference

Timepoint

Before the start of the study and 42 days after starting to take Ganoderma capsules

Method of measurement

Tape meter

5

Description

Waist

Timepoint

Before the start of the study and 42 days after starting to take Ganoderma capsules

Method of measurement

Tape meter

6

Description

Waist to hip

Timepoint

Before the start of the study and 42 days after starting to take Ganoderma capsules

Method of measurement

math formula

7

Description

blood pressure

Timepoint

Before the start of the study and 42 days after starting to take Ganoderma capsules

Method of measurement

Digital sphygmomanometer

8

Description

Total cholesterol

Timepoint

Before the start of the study and 42 days after starting to take Ganoderma capsules

Method of measurement

Direct enzymatic

9

Description

triglyceride

Timepoint

Before the start of the study and 42 days after starting to take Ganoderma capsules

Method of measurement

Direct enzymatic

10

Description

High density lipoprotein (HDL)

Timepoint

Before the start of the study and 42 days after starting to take Ganoderma capsules

Method of measurement

Direct enzymatic

11

Description

Low density lipoprotein (LDL)

Timepoint

Before the start of the study and 42 days after starting to take Ganoderma capsules

Method of measurement

Direct enzymatic

12

Description

Blood sugar

Timepoint

Before the start of the study and 42 days after starting to take Ganoderma capsules

Method of measurement

Direct enzymatic

13

Description

Physical activity

Timepoint

Before the start of the study and 42 days after starting to take Ganoderma capsules

Method of measurement

International Physical Activity Questionnaire (IPAQ)

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: This group received 3 Ganoderma supplement capsules per day, each capsule containing 220 mg of complete powder of Ganoderma lucidum and 30 mg of pure aqueous extract of Ganoderma lucidum.

Category

Treatment - Drugs

2

Description

Control group: This group received 3 capsules a day, each capsule containing 250 mg of wheat flour as a placebo.

Category

Placebo

Recruitment centers

1

Recruitment center

Name of recruitment center

Baneh salahaddin ayubi hospital

Full name of responsible person

Amine babamiri

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Islamic Azad University

Full name of responsible person

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Web page address

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Grant name

Grant code / Reference number

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

No

Title of funding source

Islamic Azad University

Proportion provided by this source

100

Public or private sector

Public

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

Other

Person responsible for general inquiries

Contact

Name of organization / entity

Islamic Azad University

Full name of responsible person

Amine babamiri

Position

Student

Latest degree

Medical doctor

Other areas of specialty/work

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Person responsible for updating data**Contact****Name of organization / entity**

Islamic Azad University

Full name of responsible person

maryam shiehmorteza

Position

Doctor f Pharmacotherapy

Latest degree

Ph.D.

Other areas of specialty/work

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Sharing plan**Deidentified Individual Participant Data Set (IPD)**

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

Study Protocol

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

Statistical Analysis Plan

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

Informed Consent Form

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

Clinical Study Report

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

Analytic Code

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

Data Dictionary

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