Clinical Trial Protocol
Iranian Registry of Clinical Trials

07 Jun 2026

The effects of slimming topical gel on anthropometric indices and body composition and biochemical factors in overweight and obese women: A double blind randomized controlled trial

Protocol summary

Study aim
The effects of slimming topical gel on anthropometric indices and body composition and biochemical factors in overweight and obese women: A randomized controlled study

Design
The study will be conducted on 30 obese and overweight women.

Settings and conduct
The study will be conducted at the Nutrition Research Center of Tabriz University of Medical Sciences and the duration of using slimming gel will be 8 weeks. The topical gels of the intervention and placebo groups will be coded by the person responsible for preparation, and the main researchers and patients will be blinded to the type of supplement consumed in each group.

Participants/Inclusion and exclusion criteria
inclusion criteria: women ,19-65 years old body mass index above30 or above 27 with one or two risk factors like hypertension and type 2 diabetes. exclusion criteria:consumption of weight loss drugs and supplements three months before the intervention Hypothyroidism heart disease Taking high-dose oral corticosteroids Pregnant and lactating women Smoking and alcohol consumption

Intervention groups
3 groups of 10 people 1) topical use of gel Slimming for the entire abdominal circumference 2) Using slimming gel for half the abdominal circumference 3) Using Oserin as a placebo for the abdominal circumference

Main outcome variables
Anthropometric indices (Weight, Height, BMI, Waist circumference, Hip circumference, Waist to Hip Ratio)

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20090609002017N37**
Registration date: **2023-06-14, 1402/03/24**
Registration timing: **prospective**

Last update: **2023-06-14, 1402/03/24**
Update count: **0**

Registration date
2023-06-14, 1402/03/24

Registrant information

Name
Alireza Ostadrahimi

Name of organization / entity
Tabriz University of Medical Sciences

Country
Iran (Islamic Republic of)

Phone
+98 41 1335 7580

Email address
ostadrahimi@tbzmed.ac.ir

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2023-06-22, 1402/04/01

Expected recruitment end date
2023-09-21, 1402/06/30

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title

The effects of slimming topical gel on anthropometric indices and body composition and biochemical factors in overweight and obese women: A double blind randomized controlled trial

Public title
The effects of slimming topical gel on overweight and obese women
Purpose
Other
Inclusion/Exclusion criteria
Inclusion criteria:
19-65 years old body mass index above30 or above 27 with one or two risk factors like hypertension and type 2 diabetes
Exclusion criteria:
consumption of weight loss drugs and supplements three months before the intervention Hypothyroidism heart disease Taking high-dose oral corticosteroids Pregnant and lactating women Smoking and alcohol consumption
Age
From **19 years** old to **65 years** old
Gender
Female

Phase
1-2
Groups that have been masked

- Participant
- Care provider
- Investigator
- Outcome assessor
- Data analyser

Sample size
Target sample size: **30**
Randomization (investigator's opinion)
Randomized
Randomization description
participants randomly using random block method and RAS (Random Allocation Software) and allocation ratio 1:1:1 and after equalization based on body mass index into 3 groups of 10 people 1) topical use of gel Slimming for the entire abdominal circumference 2) Using slimming gel for half the abdominal circumference 3) Using Oserin as a placebo for the abdominal circumference for 8 weeks
Blinding (investigator's opinion)
Double blinded
Blinding description
For all three study groups, the topical gel used will be the same in terms of shape, color and dosage. Participants, the principal investigator, health care personnel, those evaluating the outcome, the Data Safety and Monitoring Committee, and those drafting the article will be blinded.
Placebo
Used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics committee of Tabriz University of Medical Sciences
Street address
Vice Chancellor for Research and Technology,Golgasht St
City
tabriz
Province
East Azarbaijan
Postal code
5165665931
Approval date
2023-05-08, 1402/02/18
Ethics committee reference number
IR.TBZMED.REC.1402.119

Health conditions studied

1

Description of health condition studied
obesity and overweight
ICD-10 code
E66
ICD-10 code description
Overweight and obesity

Primary outcomes

1

Description
Antropometric indices (Weight, Height, BMI, Waist circumference, Hip circumference, Waist to Hip Ratio)
Timepoint
Baseline and at the end of intervention
Method of measurement
Physical exam

Secondary outcomes

1

Description
body composition
Timepoint
baseline and after intervention
Method of measurement
tanita body composition analysis device

2

Description
Liver enzymes, BUN and creatinine
Timepoint
baseline and after intervention
Method of measurement
biochemical methods

3

Description
appetite
Timepoint
baseline and after intervention
Method of measurement
visual analog scale appetite

Intervention groups

1

Description
Intervention group: The intervention group will apply the topical jell every day for 8 weeks. The instruction to use the ointment will be applying 1 cc to the whole abdominal area except around the belly button (i.e., 10 cm2) and to cover the area with a plastic sheet.
Category
Treatment - Drugs

2

Description
Intervention group: The intervention group will apply the topical jell every day for 8 weeks. The instruction to use the ointment will be applying 1 cc to the half of the abdominal area except around the belly button (i.e., 10 cm2) and to cover the area with a plastic sheet.
Category
Treatment - Drugs

3

Description
placebo group: The placebo group will apply the topical oserin every day for 8 weeks. The instruction to use the ointment will be applying 1 cc to the half of the abdominal area except around the belly button (i.e., 10 cm2) and to cover the area with a plastic sheet.
Category
Treatment - Drugs

Recruitment centers

1

Recruitment center
Name of recruitment center
Nutrition Research Center
Full name of responsible person
Dr.Alireza Ostadrahimi
Street address
Nutrition Research Center, Tabriz University of Medical Sciences; Attar Neishabouri Avenue, Golgasht
City
Tabriz
Province
East Azarbaijan
Postal code
5166614711
Phone
+98 41 3335 2295
Email
ostadrahimi@tbzmed.ac.ir

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Tabriz University of Medical Sciences
Full name of responsible person
Dr.Parviz SHahabi
Street address
Tabriz University of Medical Sciences, Attar Neishabouri Street, Golgasht Avenue
City
Tabriz
Province
East Azarbaijan
Postal code
5166614711
Phone
+98 41 3335 7580
Email
parvizshahabi@gmail.com
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Tabriz University of Medical Sciences
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
Academic

Person responsible for general inquiries

Contact
Name of organization / entity
Tabriz University of Medical Sciences
Full name of responsible person
Dr. Alireza Ostadrahimi
Position

Professor

Latest degree

Ph.D.

Other areas of specialty/work

Nutrition

Street address

Nutrition Faculty, Attar Neyshabouri Avenue, Golgasht Street

City

Tabriz

Province

East Azarbaijan

Postal code

5166614711

Phone

+98 41 3335 2292

Email

ostadrahimi@tbzmed.ac.ir

Person responsible for scientific inquiries

Contact

Name of organization / entity

Tabriz University of Medical Sciences

Full name of responsible person

Dr. Alireza Ostadrahimi

Position

Professor

Latest degree

Ph.D.

Other areas of specialty/work

Nutrition

Street address

Nutrition Faculty, Attar Neyshabouri Avenue, Golgasht Street

City

Tabriz

Province

East Azarbaijan

Postal code

5166614711

Phone

+98 41 3335 2292

Email

ostadrahimi@tbzmed.ac.ir

Person responsible for updating data

Contact

Name of organization / entity

Tabriz University of Medical Sciences

Full name of responsible person

Dr.Samira Pourmoradian

Position

Assistant Professor

Latest degree

Ph.D.

Other areas of specialty/work

Nutrition

Street address

Nutrition Faculty, Attar Neyshabouri Avenue, Golgasht Street

City

Tabriz

Province

East Azarbaijan

Postal code

5166614711

Phone

+98 41 3335 2292

Email

pourmoradians@tbzmed.ac.ir

Sharing plan

Deidentified Individual Participant Data Set (IPD)

Yes - There is a plan to make this available

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

Yes - There is a plan to make this available

Informed Consent Form

Yes - There is a plan to make this available

Clinical Study Report

Yes - There is 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

Title and more details about the data/document

Data collected for the primary outcomes will be shared.

When the data will become available and for how long

Data will be available 12 months after manuscript publication

To whom data/document is available

The data will only be available for people working in academic institutions.

Under which criteria data/document could be used

The data of the present study will only be accessible by other researchers, for conducting Meta-analysis.

From where data/document is obtainable

The researchers (student and her supervisor)

What processes are involved for a request to access data/document

Request a document via email

Comments