

Clinical Trial Protocol

Iranian Registry of Clinical Trials

17 Sep 2026

Evaluation the clinical use of conditioned media of adipose tissue derived stem cells in the treatment of female pattern hair loss

Protocol summary

Study aim

Evaluation the clinical use of conditioned media of adipose tissue derived stem cells in the treatment of female pattern hair loss

Design

This study is a pilot study on 12 patients with female pattern hair loss. In each session, one side of the patient's head (intervention group) is injected with conditioned media of adipose derived stem cells, and the other side of the head (control group) with physiological saline. This procedure will be performed once a week for 12 weeks. All patients are photographed before the treatment and in each session by digital camera and trichoscan. To determine the extent of recovery and compare the two sides of the head, at the end of the study, photos of patients are examined by two neutral dermatologists. Patient satisfaction is also recorded and the results are compared.

Settings and conduct

This project is performed in the skin and stem cell research center of Tehran university of medical sciences and without informing the patient of the intervention groups, one side of the head is used for conditioned media of adipose derived stem cells and the other side is used for blinding physiological serum in areas of hair loss.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Age between 20-60, Female patients with female pattern hair loss, Patients who do not want to take or are allergic to minoxidil. Exclusion criteria: Individuals who have used any product or medication during the previous 6 months that may affect hair growth, Pregnancy and breastfeeding History of cancer, People with Mental Disorders, Active infection of the scalp.

Intervention groups

Intervention group 1: One side of the head of conditioned media of adipose derived stem cells is injected.
Intervention group 2: The other side of the head is

injected as a physiological serum control group.

Main outcome variables

The amount of hair loss; side effects; patient's satisfaction

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20200127046282N5**

Registration date: **2022-02-20, 1400/12/01**

Registration timing: **prospective**

Last update: **2022-02-20, 1400/12/01**

Update count: **0**

Registration date

2022-02-20, 1400/12/01

Registrant information

Name

Sona Zare

Name of organization / entity

Skin and Stem Cell Research Center, Tehran
University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 21 2665 7438

Email address

sonazarebio@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2022-03-12, 1400/12/21

Expected recruitment end date

2022-06-11, 1401/03/21

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Evaluation the clinical use of conditioned media of adipose tissue derived stem cells in the treatment of female pattern hair loss

Public title

Evaluation of the effectiveness of conditioned media of adipose derived stem cells in the treatment of hair loss

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

Age between 20-60 Female patients with female pattern hair loss Patients who do not want to take or are allergic to minoxidil

Exclusion criteria:

Individuals who have used any product or medication during the previous 6 months that may affect hair growth Pregnancy and breastfeeding History of cancer People with Mental Disorders Active infection of the scalp

AgeFrom **20 years** old to **60 years** old**Gender**

Female

Phase

N/A

Groups that have been masked*No information***Sample size**Target sample size: **12**

More than 1 sample in each individual

Number of samples in each individual: **2**

A half head will be considered as the control group and one half as an intervention group.

Randomization (investigator's opinion)

Not randomized

Randomization description**Blinding (investigator's opinion)**

Single blinded

Blinding description

At each session on one side of the head, conditioned media of adipose derived stem cells and on the other side of the head, saline solution are injected.

Placebo

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

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

Research Ethics Committee of Tehran University of Medical Sciences

Street address

Keshavarz blvd, Tehran University of Medical Sciences

City

Tehran

Province

Tehran

Postal code

1937957511

Approval date

2021-07-22, 1400/04/31

Ethics committee reference number

IR.TUMS.MEDICINE.REC.1400.496

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

Hair loss

ICD-10 code

L65.9

ICD-10 code description

Nonscarring hair loss, unspecified

Primary outcomes**1****Description**

The amount of hair loss

Timepoint

Before treatment and one month after the last session

Method of measurement

Trichoscan

Secondary outcomes**1****Description**

side effects

Timepoint

One week after session

Method of measurement

Questionnaire and visit

Intervention groups**1****Description**

Control group: (other side of the head) physiological serum is injected. This will be done once a week for 12

weeks.
Category
Treatment - Other

2

Description

Intervention group: On one side of the head, conditioned media of adipose derived stem cells is injected. This will be done once a week for 12 weeks.

Category
Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center
Clinic of Skin and Stem cell Research Center of Tehran University of Medical Sciences

Full name of responsible person
Mohammad Ali Nilforoushzadeh

Street address
No 4, Maryam Alley, South Kamraniyeh Street, Tehran, Iran

City
Tehran

Province
Tehran

Postal code
1937957511

Phone
+98 21 2665 7438

Email
Dr_nilforoush@yahoo.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Skin and Stem cell Research Center of Tehran University of Medical Sciences

Full name of responsible person
Mohammad Ali Nilforoushzadeh

Street address
No 4, Maryam Alley, South Kamraniyeh Street, Tehran, Iran

City
Tehran

Province
Tehran

Postal code
1937957511

Phone
+98 21 2665 7438

Email
Dr_nilforoush@yahoo.com

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Skin and Stem cell Research Center of Tehran 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
Skin and Stem cell Research Center of Tehran University of Medical Sciences

Full name of responsible person
Sona Zare

Position
Researcher

Latest degree
Ph.D.

Other areas of specialty/work
Cellular and Molecular biology

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No 4, Maryam Alley, South Kamraniyeh Street, Tehran, Iran

City
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Province
Tehran

Postal code
1937957511

Phone
+98 21 2665 7438

Email
sonazarebio@gmail.com

Person responsible for scientific inquiries

Contact

Name of organization / entity
Skin and Stem cell Research Center of Tehran University of Medical Sciences

Full name of responsible person
Mohammad Ali Nilforoushzadeh

Position
Professor

Latest degree
Specialist

Other areas of specialty/work
Dermatology

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No 4, Maryam Alley, South Kamraniyeh Street,
Tehran, Iran

City

Tehran

Province

Tehran

Postal code

1937957511

Phone

+98 21 2665 7438

Email

Dr_nilforoush@yahoo.com

Person responsible for updating data

Contact

Name of organization / entity

Skin and Stem cell Research Center of Tehran
University of Medical Sciences

Full name of responsible person

Sona Zare

Position

Researcher

Latest degree

Ph.D.

Other areas of specialty/work

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Email

sonazarebio@gmail.com

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

Not applicable

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

Not applicable

Data Dictionary

Not applicable