

Clinical Trial Protocol

Iranian Registry of Clinical Trials

19 Jul 2026

Evaluation of the efficacy of Stromal Vascular Fraction (SVF) cells on the effect of subcision method in the treatment of acne scars; A one-blind clinical trial

Protocol summary

Study aim

Evaluation the effect of adipose derived Stromal Vascular Fraction (SVF) cells on healing of scar after subcision

Design

This pilot study on 10 patients with moderate and severe acne scarring done. after receiving adequate anesthetic, the scars of the patients are treated with subcision on both sides of the face. Immediately after subsection, one side of the patient's face (intervention group) is injected with adipose tissue-derived SVF cells, and the other side of the face (control group) is injected with nothing on the scar site. All patients are photographed by digital camera before and after treatment. To determine the rate of improvement and compare two sides of the face at the end, patient photographs are reviewed by two blind dermatologist. Patient satisfaction is also recorded and the results are compared.

Settings and conduct

This design is done at the skin and stem cell research center of Tehran university of medical sciences and without the patient's knowledge, after the subcision, SVF cells are injected on one side of the face and nothing is injected on the other side of the scar area.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Age between 20-50; Developing middle to severe atrophic scars in face region. Exclusion criteria: Pregnancy and breastfeeding; Active infection in face; Using any local drugs on face except sun protection creams in last month

Intervention groups

First intervention group: One side of the face is treated with subcision and adipose derived SVF cells in the injection position. Second intervention group: The other side of the face is treated as a control group with subcision.

Main outcome variables

scar's surface; side effects; patient's satisfaction

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20200127046282N4**

Registration date: **2021-06-17, 1400/03/27**

Registration timing: **retrospective**

Last update: **2021-06-17, 1400/03/27**

Update count: **0**

Registration date

2021-06-17, 1400/03/27

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

2021-02-15, 1399/11/27

Expected recruitment end date

2021-05-17, 1400/02/27

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Evaluation of the efficacy of Stromal Vascular Fraction (SVF) cells on the effect of subcision method in the treatment of acne scars; A one-blind clinical trial

Public title

Evaluation the efficacy of adipose derived SVF cells in the treatment of acne scars

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

Age between 20-50 Having middle to severe atrophic scar in face region

Exclusion criteria:

Pregnancy and breastfeeding History of cancer Patients with active acne People with Mental Disorders Active infection in the face

Age

From **20 years** old to **50 years** old

Gender

Both

Phase

1

Groups that have been masked

- Outcome assessor

Sample size

Target sample size: **10**

Randomization (investigator's opinion)

Not randomized

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

Single blinded

Blinding description

Blinding: Patients and physicians will not know the type of treatment, but the evaluator will know the type of patient treatment. Therefore, the study will be conducted blindly.

Placebo

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

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

Ethics Committee of Tehran University of Medical Sciences

Street address

Tehran University of Medical Sciences, Keshavarz

blvd.

City

Tehran

Province

Tehran

Postal code

1937957511

Approval date

2021-02-14, 1399/11/26

Ethics committee reference number

IR.TUMS.MEDICINE.REC.1399.1136

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

atrophic scar

ICD-10 code

L90.5

ICD-10 code description

Scar conditions and fibrosis of skin

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

Scar size

Timepoint

before and 3 month after the intervention

Method of measurement

visio face

2**Description**

Side effects

Timepoint

One week after treatment

Method of measurement

Questionnaire and visit

3**Description**

Patient Satisfaction

Timepoint

Three and six months after treatment

Method of measurement

Questionnaire

Secondary outcomes

empty

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

Control group: (Other side of face) After sufficient

anesthesia, treatment with subcision.

Category

Treatment - Other

2**Description**

Intervention group: One side of the face after being anesthetized, is first treated with subcision, and then adipose derived Stromal Vascular Fraction (SVF) cells is injected in the scars.

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

Masoumeh Roohaninasab

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No 4, Maryam Alley, South Kamraniyeh Street,
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Sponsors / Funding sources**1****Sponsor****Name of organization / entity**

Tehran University of Medical Sciences

Full name of responsible person

Mohammad Ali Sahrayian

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Sciences, Ghods st, Keshavarz blvd, Tehran, Iran

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Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

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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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

Masoumeh Roohaninasab

Position

assistant Professor

Latest degree

Specialist

Other areas of specialty/work

Dermatology

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Person responsible for updating data

Contact

Name of organization / entity
Skin and Stem cell Research Center of Tehran
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Position
researcher
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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

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