

Clinical Trial Protocol

Iranian Registry of Clinical Trials

31 May 2026

The effect of Human Umbilical Cord Wharton's Jelly Stem Cell Conditioned Medium on treatment striae: a double-blind clinical trial

Protocol summary

Study aim

The effect of Human Umbilical Cord Wharton's Jelly Stem Cell Conditioned Medium on treatment striae

Design

In this double-blind clinical trial, 10 patients with striae are included in the study and the abdominal striae area is divided into two equal parts and microneedling, one side of normal saline and the opposite side of medium conditioning is injected.

Settings and conduct

This study is performed in the center of Rasoul Akram Hospital in Tehran. All participants in this study will be blind to medium and normal saline condition. Physicians who study patient outcomes and collect and analyze information are blind to the two substances.

Participants/Inclusion and exclusion criteria

Inclusion criteria: 1. Conscious consent to participate in this study. 2. Approved striae. 3. Age over 18 and under 50.4. 4- Not receiving steroids and immunosuppressive drugs. 5- Not receiving striae treatment during the last 3 months. 6- No pregnancy and breastfeeding. 7- No collagen and vascular diseases; Exclusion criteria: 1- Using any treatment method to eliminate striae in the last three months. 2- Existence of skin lesions. 3- Existence of collagen and vascular patients. 4- Pregnancy and lactation. 5. Skin infection.

Intervention groups

In this study, Human Umbilical Cord Wharton's Jelly Stem Cell Conditioned Medium is intervention, and the intervention group is patients that suffer as striae. The control group is the same as the intervention group. In this way, the desired area is divided into two equal parts. Medium conditioning is not injected into the control part, but normal saline is injected.

Main outcome variables

Qualitative and quantitative intensity of striae

General information

Reason for update

Acronym

-

IRCT registration information

IRCT registration number: **IRCT20211027052891N1**

Registration date: **2021-11-06, 1400/08/15**

Registration timing: **prospective**

Last update: **2021-11-06, 1400/08/15**

Update count: **0**

Registration date

2021-11-06, 1400/08/15

Registrant information

Name

Masoumeh Feizollahi

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 21 6435 1000

Email address

feizollahi_masoumeh@yahoo.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-11-22, 1400/09/01

Expected recruitment end date

2022-06-21, 1401/03/31

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of Human Umbilical Cord Wharton's Jelly Stem Cell Conditioned Medium on treatment striae: a double-blind clinical trial

Public title

The effect of Stem Cell Conditioned Medium on treatment striae

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Diagnosis of striae based on the diagnosis of a dermatologist

Exclusion criteria:

Use any treatment to eliminate striae in the last three months

Age

From **18 years** old to **50 years** old

Gender

Both

Phase

3

Groups that have been masked

- Participant
- Outcome assessor

Sample size

Target sample size: **10**

Randomization (investigator's opinion)

Not randomized

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

Patients and the evaluating physician will not know which side of the abdomen is injected with normal saline and conditioned medium

Placebo

Used

Assignment

Single

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Iran University of Medical Sciences

Street address

Hazrat Rasool Akram hospital, Mansoori avenue, Sattarkhan street, Tehran, Iran

City

Tehran

Province

Tehran

Postal code

1445613131

Approval date

2021-09-11, 1400/06/20

Ethics committee reference number

IR.IUMS.FMD.REC.1400.398

Health conditions studied

1

Description of health condition studied

Striae

ICD-10 code

Striae

ICD-10 code description

L90.6

Primary outcomes

1

Description

Qualitative intensity of Striae

Timepoint

At the beginning of the study and 3 month later

Method of measurement

Photography with Visioface, Objective observation

Secondary outcomes

1

Description

Quantitative intensity of Striae

Timepoint

At the beginning of the study and 3 months later

Method of measurement

Determine the depth of the Striae by photography with Visioface

2

Description

Adverse events

Timepoint

Before the intervention, 3 months after the last treatment session

Method of measurement

Patient report, physician diagnosis

3

Description

The rate of improvement in Striae

Timepoint

Before the intervention, 3 months after the last treatment session

Method of measurement

Global Aesthetic Improvement Scale (GAIS)

Intervention groups

1

Description

Intervention group: In this group, there are patients who suffer from striae. The patient is both the intervention group and the control group. In this case, the case area is divided into two equal parts, one area of the intervention group and the other area is considered as control.

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Hazrat Rasool Akram hospital

Full name of responsible person

Elham Behrangi

Street address

Hazrat Rasool Akram hospital, Mansoori avenue, Sattarkhan street, Tehran, Iran

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elham.behrangi@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Iran University of Medical Sciences

Full name of responsible person

Dr. Seyyed Abbas Motevallian

Street address

Iran University of Medical Sciences, Shahid Hemmat Highway, Tehran, Iran

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research-m@iums.ac.ir

Grant name

Grant code / Reference number

Is the source of funding the same sponsor

organization/entity?

No

Title of funding source

Stem Cell Research Center

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

Iran University of Medical Sciences

Full name of responsible person

Elham Behrangi

Position

Associate Professor

Latest degree

Specialist

Other areas of specialty/work

Dermatology

Street address

Dermatology ward, Hazrat Rasool Akram hospital, Niayesh avenue, Satarkhan street, Tehran, Iran

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Email

elham.behrangi@gmail.com

Person responsible for scientific inquiries

Contact

Name of organization / entity

Iran University of Medical Sciences

Full name of responsible person

Elham Behrangi

Position

Associate professor

Latest degree

Specialist

Other areas of specialty/work

Dermatology

Street address

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feizollahi_masoumeh@yahoo.com

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

Iran University of Medical Sciences

Full name of responsible person

Masoumeh Feizollahi

Position

Resident

Latest degree

Medical doctor

Other areas of specialty/work

Dermatology

Street addressDermatology ward, Hazrat Rasool Akram hospital,
Mansoori avenue, Sattarkhan street, Tehran, Iran**City**

Tehran

Province

Tehran

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

Not applicable