Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 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. 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 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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1445613131

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+98 21 6651 6001

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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

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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

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

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Person responsible for scientific inquiries

Contact

Name of organization / entity
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Full name of responsible person
Elham Behrangi

Position
Associate professor

Latest degree
Specialist

Other areas of specialty/work
Dermatology

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Person responsible for updating data

Contact
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Masoumeh Feizollahi
Position
Resident
Latest degree
Medical doctor
Other areas of specialty/work
Dermatology
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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
Not applicable