

Clinical Trial Protocol

Iranian Registry of Clinical Trials

17 Jul 2026

Comparison of Microneedling Effect with Topical Tretinoin in Treatment of Acne Scars in dermatology clinic

Protocol summary

Study aim

Determining the effectiveness of microneedling in comparison with topical retinoids in the treatment and improvement of acne scars in patients referred to acne scars based on ECCA scale Determining the effectiveness of microneedling in comparison with topical retinoids in the treatment and improvement of acne scars in patients referred to acne scars based on VAS scale

Design

A clinical trial with a control group and a parallel one-way blind phase intervention group will be performed on 80 patients.

Settings and conduct

This study is performed in the dermatology clinic of Sabzevar Vasei Hospital

Participants/Inclusion and exclusion criteria

All patients with acne scars who did not attend the study were referred to a dermatology clinic Patients who have used systemic retinoid or immunosuppressive drugs for the past 3 months, patients with coagulation insufficiency or bleeding disorders, patients with evidence of colloidal scarring and active acne lesions, and pregnant and lactating women are not included in the study. To be

Intervention groups

The intervention group will undergo microneedling. And the control group will use topical retinoid cream every other day

Main outcome variables

Sunken acne scars

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20210312050680N1**

Registration date: **2021-03-17, 1399/12/27**

Registration timing: **prospective**

Last update: **2021-03-17, 1399/12/27**

Update count: **0**

Registration date

2021-03-17, 1399/12/27

Registrant information

Name

Mohammad Tajik

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 51 3258 4319

Email address

dr.moh.tajik@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-04-04, 1400/01/15

Expected recruitment end date

2021-05-31, 1400/03/10

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of Microneedling Effect with Topical Tretinoin in Treatment of Acne Scars in dermatology clinic

Public title

Effect of Tretinoin in treatment of Acnea with Microneedling

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

All patients with Acne Scars in dermatology Clinic

Exclusion criteria:
Pregnant women. People taking immunosuppressive drugs. People with coagulation failure

Age
From **18 years** old

Gender
Both

Phase
3

Groups that have been masked

- Data analyser

Sample size
Target sample size: **80**

Randomization (investigator's opinion)
Randomized

Randomization description
Block randomization method was used for randomization. The randomization unit is individual. The allocation of samples in the study was based on random sequence of statistical software (Random allocation software). The sequence used was in the form of four blocks. To hide from the method of opaque envelopes stamped and The wax was applied in a random sequence

Blinding (investigator's opinion)
Single blinded

Blinding description
All patients divided in 2 groups one of them is control and another group is intervention. A checklist is assigned to each patient After completing the data plan, it is delivered to the statistical consultant who has been blinded

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Sabzevar University of Medical Sciences

Street address

Asad abadi

City

Sabzevar

Province

Razavi Khorasan

Postal code

1234567890

Approval date

2021-03-10, 1399/12/20

Ethics committee reference number

IR.MEDSAB.REC.1399.189

Health conditions studied

1

Description of health condition studied

acnea

ICD-10 code

L90.8

ICD-10 code description

Other atrophic disorders of skin

Primary outcomes

1

Description

People with atrophic acne scars who have a theoretical analog scoring system with a score of at least 3

Timepoint

Will be checked in weeks 6, 12 and 18

Method of measurement

Visual Analogue Scale

Secondary outcomes

empty

Intervention groups

1

Description

The intervention group: after determining the severity of atrophic scars, a dermatologist will undergo microneedling. First, a local anesthetic is injected and given a 30-minute opportunity, in which the Mars device will be used at a speed of 2800 Up to 3200 depending on the location of the scars, the duration of microneedling will vary. In the intervention group, microneedling will be performed in three stages. At 6,12,18 weeks, the amount of improvement is first scored and changes are recorded with a camera

Category

Treatment - Devices

2

Description

Control group: In this group, as in the patient intervention group, a dermatologist visits and the severity of the acne scar is determined based on analogous scoring. 2800 to 3200 and depending on the location of the lesions, the time varies, then they come back 6, 12, 18 weeks later, during this period, they use topical retinoid cream every other night.

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Vasei Hospital

Full name of responsible person

Maryam Karrabi

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Shohada Hastei st

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Sabzevar University of Medical Sciences

Full name of responsible person

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Web page address

http://www.medsab.ac.ir/index

Grant name

Grant code / Reference number

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

No

Title of funding source

Vice Chancellor for Research, Sabzevar 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

Sabzevar University of Medical Sciences

Full name of responsible person

Mohammad Tajik

Position

student

Latest degree

Medical doctor

Other areas of specialty/work

General Practitioner

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Person responsible for scientific inquiries

Contact

Name of organization / entity

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Full name of responsible person

Maryam karabi

Position

specialist

Latest degree

Specialist

Other areas of specialty/work

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Person responsible for updating data

Contact

Name of organization / entity

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Full name of responsible person

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Latest degree

Medical doctor

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD

There is no more information

Study Protocol

No - There is not 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

Only part of the data related to the main outcome can be shared

When the data will become available and for how long

Start of access period 1 year after printing

To whom data/document is available

Only available to academic researchers

Under which criteria data/document could be used

Dermatologists

From where data/document is obtainable

Mr. Mohammad Tajik Address Sabzevar, Bahar St., dormitory of medical sciences

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

Send request via SMS

Comments