

Clinical Trial Protocol

Iranian Registry of Clinical Trials

22 Sep 2026

Investigating The Effect of Erbium yag and Nd yag Laser and comparing to the Er:yag on Striae Alba

Protocol summary

Study aim

1) Evaluation of the effectiveness of the ER YAG laser in the treatment of stria alba 2) Comparison of the effectiveness of Nd YAG laser and Erbium YAG laser in the treatment of stria alba 3) Evaluation of the side effects of Nd and Erbium laser treatment

Design

A controlled, parallel-group, single-blind, randomized clinical trial on 20 patients. A simple randomization method was used.

Settings and conduct

20 patients with striae Alba, bilateral One side of the laser: Nd-YAG and Er: YAG, and the other side of the Er: YAG laser 4 treatment sessions are performed with an interval of one month Erbium energy, which we will use FSO1, LP, Turbo3, energy 18-21 j/cm² and pulse duration 200 ms And for Nd modes, we will use two modes, one is FRAC3 mode and the other is PIANO, which will be as follows: FRAC3: Energy 25 j/cm² and pulse duration 1.6 ms Spot 9 mm PIANO: Energy 250 j/cm² and pulse duration 5s Spot 9mm

Participants/Inclusion and exclusion criteria

Inclusion criteria: Patients with stria alba who have been suffering from the formation of lines for at least 6 months. Patients aged 18 to 50 years. Patients' written consent to participate in the study. Exclusion criteria: Patients with other active skin diseases. Pregnancy or lactation. Not having diabetes or diseases that impair skin healing. Not being treated with corticosteroids or any medication that impairs skin healing.

Intervention groups

20 patients with striae alba should be treated bilaterally One side with laser: Nd-YAG and Er:YAG and the other side with Er:YAG laser 4 treatment sessions are performed at an interval of one month

Main outcome variables

Physician satisfaction and patient satisfaction

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20220924056032N1**

Registration date: **2025-12-05, 1404/09/14**

Registration timing: **prospective**

Last update: **2025-12-05, 1404/09/14**

Update count: **0**

Registration date

2025-12-05, 1404/09/14

Registrant information

Name

safoura shakoei

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 21 6119 2655

Email address

dr.shakoei@gmail.com

Recruitment status

recruiting

Funding source

Expected recruitment start date

2025-12-06, 1404/09/15

Expected recruitment end date

2027-02-04, 1405/11/15

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Investigating The Effect of Erbium yag and Nd yag Laser and comparing to the Er:yag on Striae Alba		vahdat eslami	
Public title	Laser treatment for steriae alba	City	Tehran
Purpose	Treatment	Province	Tehran
Inclusion/Exclusion criteria		Postal code	1419733141
Inclusion criteria:	Patients with striae alba who have been suffering from striae alba for at least 6 months Patients aged 18 to 50 years Patients provided written consent to participate in the study.	Approval date	2025-04-28, 1404/02/08
Exclusion criteria:	Patients with other active skin diseases. Not be treated with corticosteroids or any medication that interferes with skin healing. Not have diabetes or diseases that interfere with skin healing. Pregnancy or breastfeeding.	Ethics committee reference number	IR.TUMS.MEDICINE.REC.1404.103
Age	From 18 years old to 50 years old	Health conditions studied	
Gender	Both	1	
Phase	N/A	Description of health condition studied	
Groups that have been masked	Care provider	steriae alba	
Sample size	Target sample size: 20	ICD-10 code	
Randomization (investigator's opinion)	N/A	L90.6	
Randomization description		ICD-10 code description	
Blinding (investigator's opinion)	Double blinded	Striae atrophicae	
Blinding description	Twenty patients will be randomly assigned in a single-blinded manner. Patients will be recruited from individuals who visit the laser clinic and meet the inclusion criteria. The patients will be randomly (block randomization) assigned to the right and left sides of the patients, respectively, to receive the following two treatments: 1) Nd: YAG laser treatment. 2) Erbium YAG and nd yag laser treatment	Primary outcomes	
Placebo	Not used	1	
Assignment	Parallel	Description	
Other design features		Improve striae	
Secondary Ids		Timepoint	
empty		Before the intervention (first session), third session, and fifth month	
Ethics committees		Method of measurement	
1		Patient satisfaction between 0-10 and physician satisfaction between 0-100% with visual analogue method	
Ethics committee		Secondary outcomes	
Name of ethics committee		empty	
Ethics committee of Tehran University of Medical Sciences		Intervention groups	
Street address		1	
		Description	
		Intervention group: They will undergo Erbium and Nd:YAG laser treatment with the Fotona laser device. Up to 4 sessions will be performed once a month.	
		Category	
		Treatment - Devices	
		2	
		Description	
		Control group: They will undergo erbium laser treatment with the Fotona laser device, which will be performed once a month for up to 4 sessions.	
		Category	
		Treatment - Devices	

Recruitment centers

1

Recruitment center

Name of recruitment center

Razi hospital

Full name of responsible person

safoura shakoei

Street address

Razi hospital, vahdat eslami street, Tehran

City

Tehran

Province

Tehran

Postal code

1419733141

Phone

+98 21 5561 8989

Email

dr.shakoei@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Tehran University of Medical Sciences

Full name of responsible person

Ramin Kordi

Street address

Keshavarz Boulevard, corner of Qods Street, Central University Organization, 6th Floor, Vice President for Research and Technology

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Province

Tehran

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141765383761

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+98 21 8163 3698

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vcr@tums.ac.ir

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

Tehran University of Medical Sciences

Full name of responsible person

Safoura Shakoei

Position

Associate professor

Latest degree

Specialist

Other areas of specialty/work

Dermatology

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Person responsible for scientific inquiries

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Person responsible for updating data

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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

No - There is not a plan to make this available

Statistical Analysis Plan

No - There is not a plan to make this available

Informed Consent Form

No - There is not a plan to make this available

Clinical Study Report

Yes - There is a plan to make this available

Analytic Code

No - There is not a plan to make this available

Data Dictionary

Not applicable

Title and more details about the data/document

It will be made available to researchers upon request from the corresponding author of the study.

When the data will become available and for how long

After published

To whom data/document is available

people working in academic institutions

Under which criteria data/document could be used

Data dissemination is not permitted.

From where data/document is obtainable

Department of Dermatology, Razi Hospital, Tehran

University of Medical Sciences (TUMS), Tehran, Iran.

Email: dr.shakoei@gmail.com

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

send email

Comments