

Clinical Trial Protocol

Iranian Registry of Clinical Trials

19 Sep 2026

Comparison of platelet rich plasma with fractional Co2 laser and fractional Co2 laser alone on skin rejuvenation in patients with aging

Protocol summary

Summary

This is a pilot study. Patients referred to clinics of Skin and Stem cell Research Center and also Jordan and Novin laser clinic in 2013-2014 will be enrolled in this study. Inclusion Criteria: Age 30-50 - Patients with mild to moderate wrinkles according to Glogue scale I-III - No coagulation disorders and use of anti coagulated drugs - No infection in treated site - No fever able diseases - No chronic liver diseases - No pregnancy or breast-feeding. After filling the questionnaire and consent form (with explanation of study benefits) and after taking the photography, patients will be randomly (according to Saghai randomization software) divided in to 15 person groups: First group will be treated with platelet rich plasma (PRP) along with Co2 fractional laser and second group will be treated with Co2 fractional laser alone. Photography will be taken from patients 1 and 3 months after treatment and the information of patients will be recorded. Then the pictures will be assessed by 2 blinded physicians and will be ranked according to improvement percents and scores: Improvement of 0-25%: Score 1, Improvement of 26-50%: Score 2, Improvement of 51-75%: Score 3, Improvement more than 75%: Score 4.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201308281159N10**

Registration date: **2013-09-22, 1392/06/31**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2013-09-22, 1392/06/31

Registrant information

Name

Mohamad Ali Nilforoushzadeh

Name of organization / entity

Skin and Stem Cell Research Center, Tehran
University of Medical sciences

Country

Iran (Islamic Republic of)

Phone

+98 21 2220 5158

Email address

sdirc@mui.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Tehran University of Medical Sciences

Expected recruitment start date

2012-12-21, 1391/10/01

Expected recruitment end date

2014-03-21, 1393/01/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of platelet rich plasma with fractional Co2 laser and fractional Co2 laser alone on skin rejuvenation in patients with aging

Public title

Comparison of platelet rich plasma and fractional Co2 laser on skin rejuvenation in patients with aging

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion Criteria: Age 30-50 - Patients with mild to moderate wrinkles according to Glogue scale I-III - No

coagulation disorders and use of anti coagulated drugs -
No infection in treated site - No fever able diseases - No
chronic liver diseases - No pregnancy or breast-feeding.
Exclusion Criteria: Patients who will not return for follow
up visits or are not willing to participate will be excluded.

Age

From **30 years** old to **50 years** old

Gender

Both

Phase

3

Groups that have been masked

No information

Sample size

Target sample size: **30**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Single blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Randomization is done using random number table. Also
because the pictures will be assessed by 2 blinded
physicians, so this study is single blinded.

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, Enghelab
Street, Tehran, Iran

City

Tehran

Postal code

Approval date

2012-12-01, 1391/09/11

Ethics committee reference number

70441

Health conditions studied

1

Description of health condition studied

Face wrinkles

ICD-10 code

L98.8

ICD-10 code description

Other specified disorders of skin and subcutaneous
tissue

Primary outcomes

1

Description

Severity of face wrinkles

Timepoint

Before treatment and 1 and 3 months after treatment

Method of measurement

Glogue wrinkle scale

Secondary outcomes

empty

Intervention groups

1

Description

Treatment of platelet rich plasma (PRP) + fractional Co2
laser: First, patients will be anesthetized with topical
Lidocaine-P and then will be treated with Co2 fractional
laser (Dosis) with pixel pitch: 1, dot cycle: 3 and
power:15 for 4 sessions with 3 week intervals and
superficial injection of platelet rich plasma (prepared by
Zist Partak laboratory) 1 week after last laser session
that small bump will be appeared. Many superficial
injections will be nearly done with 1 cm intervals.

Category

Treatment - Other

2

Description

Treatment with fractional Co2 laser alone: Patients will
be anesthetized with topical Lidocaine-P and then will be
treated with Co2 fractional laser (Dosis) with pixel pitch:
1, dot cycle: 3 and power: 15 for 4 sessions with 3 week
intervals.

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Clinics of Skin and Stem cell Research Center of
Tehran University of Medical Sciences

Full name of responsible person

Street address

City

Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for research, Tehran University of Medical Sciences

Full name of responsible person

Akbar Fotouhi

Street address

Vice chancellor for research, Tehran University of Medical Sciences, Enghelab Street, Tehran, Iran

City

Tehran

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Vice chancellor for research, Tehran University of Medical Sciences

Proportion provided by this source

100

Public or private sector

empty

Domestic or foreign origin

empty

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

empty

Person responsible for general inquiries

Contact

Name of organization / entity

Skin Diseases and Leishmaniasis Research Center, Isfahan University of Medical Sciences, Isfahan, Ir

Full name of responsible person

Elaheh Haftbaradaran

Position

General Physician

Other areas of specialty/work

Street address

Skin Diseases and Leishmaniasis Research Center, Isfahan University of Medical Sciences, Sedigheh Tahereh (AS) Research Centers Complex, Khorram Ave., Isfahan, Iran

City

Isfahan

Postal code

Phone

+98 31 1337 3736

Fax

Email

elahe_MD2003@YAHOO.COM

Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity

Skin and Stem Cell Research Center, Tehran University of Medical Sciences, Tehran, Iran

Full name of responsible person

Mohamad Ali Nilforoushzadeh

Position

Associate Professor

Other areas of specialty/work

Street address

Skin and Stem Cell Research Center, third floor, no 4, Maryam impasse, Kamranieh st, Tehran

City

Tehran

Postal code

Phone

+98 21 2221 2537

Fax

Email

sdlrc@mui.ac.ir

Web page address

Person responsible for updating data

Contact

Sharing plan

Deidentified Individual Participant Data Set (IPD)

empty

Study Protocol

empty

Statistical Analysis Plan

empty

Informed Consent Form

empty

Clinical Study Report

empty

Analytic Code

empty

Data Dictionary

empty