

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Efficacy and Side Effects of Trichloroacetic Acid (TCA) versus Cryotherapy in the Treatment of Solar Lentigo

Protocol summary

Summary

The present study has been done to compare efficiency and side effects of Trichloroacetic Acid (TCA) 35% with cryotherapy in the treatment of solar lentigo. This study was a randomized clinical trial performed on 35 individuals suffering from solar lentigo on their hands. At first, images were taken from both hands, and then one side was treated with cryotherapy and the other side with TCA 35%. The treatment was repeated after one month. The imaging was repeated at the end of the second month and both sides were compared with previous images considering degree of improvement (lightening) of lesions and the resulted side effects.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT138904084269N1**

Registration date: **2010-10-09, 1389/07/17**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2010-10-09, 1389/07/17

Registrant information

Name

Farideh Golfroushan

Name of organization / entity

Tabriz University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 41 1541 2101

Email address

golfroushanf@tbzmed.ac.ir

Recruitment status

Recruitment complete

Funding source

Research Vice-chancellor of Tabriz University of Medical Sciences

Expected recruitment start date

2008-10-15, 1387/07/24

Expected recruitment end date

2009-10-16, 1388/07/24

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Efficacy and Side Effects of Trichloroacetic Acid (TCA) versus Cryotherapy in the Treatment of Solar Lentigo

Public title

Efficacy of Chemical peeling versus Cryotherapy in the Treatment of Solar Lentigo

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: solar lentigo of face or hand
Exclusion criteria: wart, recurrent herpes, sensitivity to light, raynaud phenomenon, pregnancy, lactation, sunburn within recent 2-3 days, those who have received treatments such as surgery, cryotherapy, radiotherapy or PUVA therapy within the last 6 weeks or Isotretinoin during last 6 months

Age

No age limit

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: 35

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Single blinded

Blinding description

Placebo

Not used

Assignment

Other

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethic Committee of Tabriz University of Medical Sciences

Street address

Tabriz University of Medical Sciences, Tabriz, Iran

City

Tabriz

Postal code

Approval date

empty

Ethics committee reference number

887

Health conditions studied

1

Description of health condition studied

Solar lentigo

ICD-10 code

L81.4

ICD-10 code description

other melanin hyperpigmentation

Primary outcomes

1

Description

Lightening of lesions

Timepoint

2 months after treatment

Method of measurement

clinical

Secondary outcomes

1

Description

Side effects: Permanent & severe pain, Blister, Permanent erythema & edema, hyperpigmentation, hypopigmentation, scar

Timepoint

Every month

Method of measurement

clinical

Intervention groups

1

Description

After washing with water and soap, the lesion was treated with TCA 35% with a cotton applicator

Category

Treatment - Drugs

2

Description

Cryotherapy spray for one time so that tip of the spray had a 3-centimeter distance with the lesion and spraying was continued until surface of the lesion became frosted as a result of spraying. Duration of spraying varied from 2 to 5 seconds regarding diameter of the lesion.

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Sina Educational and Therapeutic Center of Tabriz

Full name of responsible person

Dr. Farideh golfroushan

Street address

Dermatology Word, Sina Hospital, Azadi St., Tabriz,

City

Tabriz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Research Vice-chancellor of Tabriz University of Medical Sciences

Full name of responsible person

Dr. Rasoul Azarfarin

Street address

Research Vice-chancellor, Tabriz University of Medical Sciences,

City

Tabriz

Grant name

Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Research Vice-chancellor of Tabriz 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
Tabriz University of Medical Sciences
Full name of responsible person
Dr. Farideh Golfroushan
Position
Assistant Professor of Dermatology
Other areas of specialty/work
Street address
Dermatology Word, Sina Hospital, Azadi St., Tabriz,
City
Tabriz
Postal code
Phone
+98 914 315 5647
Fax
Email
Dr_fGolfroushan@yahoo.com
Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity
Tabriz University of Medical Sciences
Full name of responsible person
Dr. Farideh Golfroushan
Position

Assistant Professor of Dermatology
Other areas of specialty/work
Street address
Dermatology Word, Sina Hospital, Azadi St., Tabriz,
City
Tabriz
Postal code
Phone
+98 914 315 5647
Fax
Email
Dr_fGolfroushan@yahoo.com
Web page address

Person responsible for updating data

Contact

Name of organization / entity
Tabriz University of Medical Sciences
Full name of responsible person
Mohammad Sadeghi
Position
Resident of Dermatology
Other areas of specialty/work
Street address
Dermatology Word, Sina Hospital, Azadi St., Tabriz,
City
Tabriz
Postal code
Phone
Fax
Email
Mohsad_1357@yahoo.com
Web page address

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