

Clinical Trial Protocol

Iranian Registry of Clinical Trials

20 Sep 2026

Evaluation of efficacy and safety of diphencyprone treatment on alopecia areata of eyebrows of patients referred to Tehran Razi hospital`s diphencyprone clinics in year 1394

Protocol summary

Summary

Summary: Despite effective treatment results of diphencyprone treatment for scalp alopecia areata, very few studies have evaluated its results for eyebrow area. Therefore, designing a study to evaluate the therapeutic efficacy and side effects of diphencyprone on the eyebrow could be useful. In this clinical trial, the study population are patients referring to diphencyprone clinic of Razi dermatology hospital at Tehran University of medical sciences. Treatment of the left or right eyebrow will be started randomly and the other eyebrow would be untreated as control. After favorable response, the treatment will be continued on both sides. Patients with bilateral eyebrow involvement will be enrolled in the study. Those who have received treatment on eyebrows in the past three months, or with a history of vitiligo will be excluded. A sample size of 40 is estimated. Intervention of this study is diphencyprone application on eyebrow weekly for 6 months. Before treatment, and after three and six months of treatment, imaging of both eyebrow will be performed. Regrowth of hair will be compared between two eyebrows with and without active treatment. By comparing the changes in alopetic region of eyebrow before and after treatment on images in the semi-quantitative manner, therapeutic effects of diphencyprone used in the eyebrow area will be evaluated.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015061520250N1**
Registration date: **2015-11-17, 1394/08/26**
Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2015-11-17, 1394/08/26

Registrant information

Name

Narges Ghandi

Name of organization / entity

Tehran University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 21 5561 8989

Email address

nghandi@tums.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice chancellor of research and technology, Tehran University of Medical Sciences and Health Services

Expected recruitment start date

2015-11-09, 1394/08/18

Expected recruitment end date

2017-01-10, 1395/10/21

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Evaluation of efficacy and safety of diphencyprone treatment on alopecia areata of eyebrows of patients referred to Tehran Razi hospital`s diphencyprone clinics in year 1394

Public title

Diphencyprone effect on alopecia areata of eyebrow

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Age 12 to 65 , bilateral eyebrows involvement, the patient's consent to participate in research projects Exclusion criteria: systemic or topical steroid treatment /immunosuppressive therapy (azathioprine , mycophenolate mofetil) and diphencyprone treatment for eyebrows in the past three months, a personal or a family history of vitiligo, history of Koebner positive dermatoses such as psoriasis, pregnancy or lactation, history of liver/kidney/thyroid disease

Age

From **12 years** old to **65 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **40**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Tehran University of Medical Sciences Ethics committee

Street address

Tehran University of Medical Sciences, Office of Vice Chancellor for Research and Technology, 6th floor, Ghods Street, Keshavarz Boulevard

City

Tehran

Postal code

Approval date

2015-08-10, 1394/05/19

Ethics committee reference number

ir.tums.rec.1394.550

Health conditions studied

1

Description of health condition studied

Alopecia areata

ICD-10 code

L63

ICD-10 code description

Alopecia areata

Primary outcomes

1

Description

Terminal hair regrowth

Timepoint

Third and sixth months after intervention

Method of measurement

Eyebrow regrowth percentage by comparing patients images

Secondary outcomes

1

Description

Patient satisfaction following treatment

Timepoint

Third and sixth months after intervention

Method of measurement

Visual analogue scale

2

Description

Treatment complications

Timepoint

Every two weeks (24 times during the study)

Method of measurement

History taking and physical examination

Intervention groups

1

Description

The intervention in this study is topical application of diphencyprone solution on eyebrow by patients. Solution dosage will be determined by a dermatologist. Treatment will be started at 0.0001%-0.001% concentration and after serial examination and history taking it will be increased biweekly as follows: 0.01%, 0.1%, 0.2%, 0.5%, 1% and 2%. The solution will be applied weekly on one eyebrow for six months. Intervention is unilateral for randomly selected side and the other side would be the control. After terminal hair regrowth application would be bilateral. Before and at third and sixth months of treatment, photography of eyebrows would be performed. Different concentrations that mentioned

above will be made of diphencyprone powder (product of Sigma Aldrich Company) in acetone base at Razi hospital`s synthetic drugs ward.

Category

Treatment - Drugs

2

Description

No intervention

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Razi hospital of dermatology

Full name of responsible person

Dr.Sepideh Khani

Street address

Razi Hospital, Vahdate- Eslami Avenue, Vahdate- Eslami Square

City

Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor of Research and Technology,Tehran
University of Medical Sciences and Health Services

Full name of responsible person

Dr.Masud Yunesian

Street address

Tehran University of Medical Sciences, Office of Vice
Chancellor for Research and Technology, 6th floor,
Ghods Street, Keshavarz Boulevard

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 of Research and Technology,Tehran
University of Medical Sciences and Health Services

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

Razi hospital of dermatology

Full name of responsible person

Dr.Sepideh Khani

Position

Dermatology Resident

Other areas of specialty/work

Street address

Razi Hospital, Vahdate- Eslami Avenue, Vahdate- Eslami Square

City

Tehran

Postal code

Phone

+98 21 5561 8989

Fax

Email

Drsepideh.khani@gmail.com

Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity

Razi hospital of dermatology

Full name of responsible person

Dr.Narges Ghandi

Position

Dermatologist

Other areas of specialty/work

Street address

Razi Hospital, Vahdate- Eslami Avenue, Vahdate- Eslami Square

City

Tehran

Postal code

Phone

+98 21 5561 8989

Fax

Email

Nghandi@tums.ac.ir

Web page address

Person responsible for updating data

Contact

Name of organization / entity

Razi hospital of dermatology

Full name of responsible person

Dr.Sepideh Khani

Position

Dermatology resident

Other areas of specialty/work

Street address

Razi Hospital, Vahdate- Eslami Avenue, Vahdate- Eslami Square

City
Tehran
Postal code
Phone
+98 21 5561 8989
Fax
Email
Drsepideh.khani@gmail.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