Clinical Trial Protocol
Iranian Registry of Clinical Trials

09 Nov 2026

Investigating the efficacy and safety of platelet rich plasma and topical clobetasol in treating hair loss of patients with lichen planopilaris in comparison to the patients who only use topical clobetasol

Protocol summary

Study aim
Using a new treatment method with better results in patients with lichen plano pilaris

Design
Tow arm parallel group randomised trial without blinding on 22 patients.

Settings and conduct
We will take 20cc blood of peripheral vein of patients with lichen plano pilaris registered in dermatology clinic of Rasoul Akram Hospital. then after centrifuging 1500rpm in 5 minutes , the paltelet rich part will be seperated and injected to the site with syringe gage 30.

Participants/Inclusion and exclusion criteria
The patients should only have lichen planopilaris and no other form of generalized or erosive lichen planus. also, only patients who could not take benefit of systemic treatments will enter the study.

Intervention groups
In the patients of case group, 11 patients receive both topical clobetasol and PRP injection. The patients of control group will receive only topical clobetasol.

Main outcome variables
Reduction of hair loss; scalp pruritus; scalp erythema and perifollicular scaling

General information

Reason for update

Acronym
Lichen Planopilaris (LPP)

IRCT registration information
IRCT registration number: **IRCT20221018056229N1**
Registration date: **2023-01-28, 1401/11/08**
Registration timing: **retrospective**

Last update: **2023-01-28, 1401/11/08**
Update count: **0**

Registration date
2023-01-28, 1401/11/08

Registrant information

Name
Zahra Lotfi

Name of organization / entity

Country
Iran (Islamic Republic of)

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+98 21 8802 8412

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zahra_lotfi90@yahoo.com

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2022-12-05, 1401/09/14

Expected recruitment end date
2022-12-21, 1401/09/30

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Investigating the efficacy and safety of platelet rich plasma and topical clobetasol in treating hair loss of patients with lichen planopilaris in comparison to the patients who only use topical clobetasol

Public title
Investigating the efficacy and safety of platelet rich plasma in treating hair loss of patients with lichen planopilaris

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Age: 18 years old and more Definite and resistant hair loss due to LPP The patient gives informed consent The patient can participate in regular follow up meetings The patient does not have serious internal disease The patient does not have cutaneous disease in the site of treatment

Exclusion criteria:

History of any remedies taken in last month Positive history of liver, kidney, pulmonary, cardiac, and intestinal disease and malignancies Taking any medications for any disease which makes drug reactions possible Accompanying of LPP with generalized lichen planus or erosive mucosal form Other forms of noncicatricial or other forms of cicatricial alopecia except LPP

Age

From **18 years** old to **70 years** old

Gender

Both

Phase

3

Groups that have been masked

No information

Sample size

Target sample size: **22**

Randomization (investigator's opinion)

Not 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

Iran University of Medical Sciences Ethics' Committee

Street address

Iran University of Medical Sciences, Hemmat Highway, Tehran

City

Tehran

Province

Tehran

Postal code

1449614535

Approval date

2022-08-23, 1401/06/01

Ethics committee reference number

IR.IUMS.FMD.REC.1401.310

Health conditions studied

1

Description of health condition studied

Scalp hair lichen planopilaris

ICD-10 code

L43.8

ICD-10 code description

Other lichen planus

Primary outcomes

1

Description

The amount of scalp erythema based on LPPI

Timepoint

Investigating of scalp hair situation with using dermatoscope, at the first visit, at 1 month and 2 months and then 6 months after the first visit

Method of measurement

Dermatoscopy with dermatoscope

2

Description

The amount of scalp scaling based on LPPI

Timepoint

Investigating of scalp hair situation with using dermatoscope, at the first visit, at 1 month and 2 months and then 6 months after the first visit

Method of measurement

Dermatoscopy with dermatoscope

3

Description

The amount of scalp pruritus based on LPPI

Timepoint

Investigating of scalp hair situation with using dermatoscope, at the first visit, at 1 month and 2 months and then 6 months after the first visit

Method of measurement

Dermatoscopy with dermatoscope

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: the patients will receive Behvazan topical clobetasol 0.05% lotion 20 drops every night, and they will also receive 3 courses of PRP in 1-month intervals. Each PRP treatment session is as described subsequently: After aspirating 20cc of the patient's

venous blood, the blood is centrifuged in 4 citrated sample tubes with 1500rpm in the Iranian Universal centrifuge device. Then the middle part of the plasma (rich with platelets) is extracted and injected intradermally into the patient's scalp with a 30-gauge needle.

Category
Treatment - Drugs

2

Description
Control group: the patients will receive Behvazan topical clobetasol 0.05% lotion 20 drops every night

Category
Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center
Dermatology Clinic of Rasoul Akram Hospital

Full name of responsible person
Zahra Lotfi

Street address
Rasool Akram Hospital, Maziyar Mansouri st, Sattarkhan

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zahra_lotfi90@yahoo.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Iran University of Medical Sciences

Full name of responsible person
Hossein Keyvani

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Grant name

Grant code / Reference number

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

Title of funding source
Iran 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
Iran University of Medical Sciences

Full name of responsible person
Zahra Lotfi

Position
MD - Dermatology Resident

Latest degree
Medical doctor

Other areas of specialty/work
Dermatology

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Rasool Akram Hospital, Maziyar Mansouri Street, Sattarkhan Avenue, Tehran, Iran

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Person responsible for scientific inquiries

Contact

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Full name of responsible person
Zahra Lotfi

Position
MD - Dermatology resident

Latest degree
Medical doctor

Other areas of specialty/work
Dermatology

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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
Undecided - It is not yet known if there will be a plan to make this available
Statistical Analysis Plan
Undecided - It is not yet known if there will be a plan to make this available
Informed Consent Form
Undecided - It is not yet known if there will be a plan to make this available
Clinical Study Report
Undecided - It is not yet known if there will be a plan to make this available
Analytic Code
Not applicable
Data Dictionary
Not applicable