Clinical Trial Protocol
Iranian Registry of Clinical Trials

18 Sep 2026

Assessment of autologous Platelet-Rich Plasma Injections in the Treatment of male pattern Androgenetic Alopecia

Protocol summary

Summary

This study is for assessment of PRP local injection in hair loss treatment among males suffering from androgenetic alopecia between grade 3v to 5 according Hamilton-Norwood scaling system. Written informed consent was obtained. Volunteers were selected from patients in Mashhad Quaem hospital`s skin clinic in 2015. In every session, 50cc of blood volume was taken from brachial vein and then in sterile condition for separating autologous platelets sent to stem cell lab in Mashhad college of medicine that has specific clean room. After preparation, approximately 5cc of PRP was obtained. This concentrate has fourfold to eightfold more platelet and growth factors. Immediately after preparation, this platelet concentrate is injected by dermatology resident with local anaesthesia and intradermally. This procedure is performed for 3 sessions with 4 weeks interval. Digital photography (with 20 cm distance) and dermatoscopy images in constant locations (determining with an equal distance from a point exactly upside eyebrows in midpuppil line to vertex area in midline) is performed in weeks 0, 4, 8 and 12 as well as 3 months after last injection.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016021526563N1**
Registration date: **2016-05-29, 1395/03/09**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2016-05-29, 1395/03/09

Registrant information

Name

Mohammad Javad Yazdanpanah

Name of organization / entity

Mashhad University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 51 3801 2851

Email address

yazdanpanahmj@mums.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice chancellor for research of Mashhad University of Medical Sciences

Expected recruitment start date

2015-07-23, 1394/05/01

Expected recruitment end date

2016-02-20, 1394/12/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Assessment of autologous Platelet-Rich Plasma Injections in the Treatment of male pattern Androgenetic Alopecia

Public title

Effect of PRP on male pattern hair loss

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: patients include males with male pattern androgenetic alopecia who had acquiescence for participation in this study and their baldness is grade 3v to 5 according to Hamilton-Norwood scaling system.
Exclusion criteria: using minoxidil or finasteride in the

last 6 months; using any other systemic or topical supplementary drugs for hair growth stimulation in the last 6 months; using drugs that can induce hair loss (eg. Retinoids, heavy metals, antithyroids, anticonvulsants, betablockers and ...); specific diseases like thyroid disease, collagen vascular disease ...; positive history for any kind of cancer or skin cancer and chemotherapy; any other kind of alopecia (scaring alopecia, alopecia areata, ...); steroid therapy; coagulation disorders, acquisition of aspirin, ticlopidine or other anticoagulative drugs; dialysis patients and platelet disorders (thrombocytopenia); smoker and alcoholic persons and malnutrition; and anytime patient wants to leave the study.

Age
From **28 years** old to **60 years** old

Gender
Male

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **20**

Randomization (investigator's opinion)
N/A

Randomization description

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Single

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Ethics committee of Mashhad University of Medical Sciences

Street address
Central building of Mashhad University of Medical Sciences(Ghorshi), Daneshgah 16, Daneshgah Street

City
Mashhad

Postal code

Approval date
2015-01-21, 1393/11/01

Ethics committee reference number
930092

Health conditions studied

1

Description of health condition studied
Male androgenetic alopecia

ICD-10 code
L64

ICD-10 code description
Androgenic alopecia

Primary outcomes

1

Description
Hair loss improvement and stimulation of hair growth

Timepoint
Measurement on weeks 0, 4, 8, 12 and 3 months after last injection

Method of measurement
Average hair diameter and hair count in unit surface

Secondary outcomes

1

Description
Side effects

Timepoint
At the end of treatment (3 months after last injection)

Method of measurement
Effectiveness and side effects include local and systemic reactions according to patients and investigator observations

Intervention groups

1

Description
injection of Platelet-Rich Plasma (PRP) 3 times in 4 weeks.

Category
Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center
Dermatology clinic, Quaem Hospital

Full name of responsible person
Dr Mohammad Javad Yazdanpanah

Street address
Department of dermatology, Quaem hospital, Ahmad Abad Street

City
Mashhad

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Vice chancellor for research of Mashhad University of Medical Sciences
Full name of responsible person
Dr Mohsen Tafaghodi
Street address
Central Building of Mashhad University of Medical Sciences (Ghorshi), Daneshgah 16, Daneshgah street
City
Mashhad
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 of Mashhad 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
Mashhad University of Medical Sciences
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Position
Professor of dermatology
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Person responsible for updating data

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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