

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Comparison of Conventional and Pattern Scanning Pan retinal Photocoagulation Effects on Diabetic Patients' visual field

Protocol summary

Study aim

Comparison of Conventional and Pattern Scanning Pan retinal Photocoagulation Effects on Diabetic Patients visual field

Design

Clinical trials, community based and pragmatic, with parallel groups, blinded

Settings and conduct

Twenty patients with proliferative diabetic retinopathy or severe non-proliferative diabetic retinopathy or one eye with proliferative diabetic retinopathy and the other with severe non-proliferative diabetic retinopathy, requiring PRP and had inclusion criteria were enrolled in the study. One day prior to the PRP, the patients underwent SITA Standard 30-II primetry for both eyes. One eye underwent the Conventional PRP and other eye under Pattern Scanning PRP simultaneously. Perimetry was repeated one month after the initial PRP and evaluated for visual field defect

Participants/Inclusion and exclusion criteria

All patients who were referred to the clinic of the Nikookari Hospital at Tabriz University of Medical Sciences diagnosed with proliferative diabetic retinopathy and severe non-proliferative diabetic retinopathy were enrolled in the study

Intervention groups

This study is a Controlled Trial. All patients who were referred to the clinic of the Nikookari Hospital at Tabriz University of Medical Sciences diagnosed with proliferative diabetic retinopathy and severe non-proliferative diabetic retinopathy were enrolled in the study

Main outcome variables

Conventional and Pattern Scanning Pan retinal Photocoagulation Effects on Diabetic Patients visual field

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20181123041737N1**
Registration date: **2019-01-06, 1397/10/16**
Registration timing: **retrospective**

Last update: **2019-01-06, 1397/10/16**

Update count: **0**

Registration date

2019-01-06, 1397/10/16

Registrant information

Name

Republica Islamica Iran Latifi

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 41 3657 7330

Email address

atena.latifi@yahoo.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2018-12-01, 1397/09/10

Expected recruitment end date

2018-12-31, 1397/10/10

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of Conventional and Pattern Scanning Pan retinal Photocoagulation Effects on Diabetic Patients' visual field

Public title

Comparison of Conventional and Pattern Scanning Pan retinal Photocoagulation Effects on Diabetic Patients' visual field

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

Proliferative diabetic retinopathy or severe non-proliferative diabetic retinopathy patients Patients with informed consent Patients with proper collaboration to perform a primetry

Exclusion criteria:

Patients with ocular infections Glaucoma or uveitis patients Patients with degenerative or inherited retinal disease which leads to visual field damage Any ocular disease that impairs the performance of primetry Lack of proper access to patient to follow up Diabetic maculopathy History of previous laser retinal treatment turbid media

Age

No age limit

Gender

Both

Phase

N/A

Groups that have been masked

- Participant
- Care provider
- Investigator
- Outcome assessor
- Data analyser

Sample size

Target sample size: 20

Randomization (investigator's opinion)

Not randomized

Randomization description**Blinding (investigator's opinion)**

Double blinded

Blinding description

In the present study, the patient, the resident (Evaluator)and the nurse are kept blind , but the physician conducting the PRP is aware.

Placebo

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Ethics committee of Tabriz University of Medical

Sciences

Street address

Abbasi Ave., Nikukari Hospital

City

Tabriz

Province

West Azarbaijan

Postal code

5154645395

Approval date

2018-06-25, 1397/04/04

Ethics committee reference number

IR.TBZMED.REC.1397.269

Health conditions studied**1****Description of health condition studied**

proliferative diabetic retinopathy or severe non-proliferative diabetic retinopathy

ICD-10 code**ICD-10 code description****Primary outcomes****1****Description**

Conventional Pan retinal Photocoagulation Effects on Diabetic Patients visual field

Timepoint

One day prior to the PRP and one month after the initial PRP

Method of measurement

Humphrey 30-II SITA Standard perimetry

2**Description**

Pattern Scanning Pan retinal Photocoagulation Effects on Diabetic Patients visual field

Timepoint

One day prior to the PRP and one month after the initial PRP

Method of measurement

Humphrey 30-II SITA Standard perimetry

Secondary outcomes**1****Description**

Visual acuity

Timepoint

One day prior to the PRP and one month after the initial PRP

Method of measurement

Snellen chart

Intervention groups

1

Description

Intervention group: Twenty patients with proliferative diabetic retinopathy or severe non-proliferative diabetic retinopathy or one eye with proliferative diabetic retinopathy and the other with severe non-proliferative diabetic retinopathy, requiring PRP. One eye underwent the Conventional PRP . In Conventional PRP method, power 250-550 mW, spot-laser 200-500 μ and pulse durations 100ms were applied. Spot spacing was considered as half the spot size width.

Category

Treatment - Other

2

Description

Intervention group: Twenty patients with proliferative diabetic retinopathy or severe non-proliferative diabetic retinopathy or one eye with proliferative diabetic retinopathy and the other with severe non-proliferative diabetic retinopathy, requiring PRP. One eye underwent the Pattern Scanning PRP. In the pattern scanning method, the power of 150-550 mW, the pulse duration of 10-30 ms, the 200 μ m laser spot, and the laser spot spacing of 100 μ m were applied.

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Nikukari hospital

Full name of responsible person

Atena Latifi

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Abbasi Ave., Nikukari hospital

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Tabriz University of Medical Sciences

Full name of responsible person

Atena latifi

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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

Tabriz 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

Tabriz University of Medical Sciences

Full name of responsible person

atena latifi

Position

Resident

Latest degree

Medical doctor

Other areas of specialty/work

Ophthalmology

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Person responsible for scientific inquiries

Contact

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Position
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Other areas of specialty/work
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Person responsible for updating data

Contact

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Yes - There is a plan to make this available

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

Yes - There is a plan to make this available

Informed Consent Form

Yes - There is a plan to make this available

Clinical Study Report

Yes - There is a plan to make this available

Analytic Code

Yes - There is a plan to make this available

Data Dictionary

Yes - There is a plan to make this available

Title and more details about the data/document

All data can be shared

When the data will become available and for how long

6 months after the publication of the results

To whom data/document is available

Researchers working in academic institutions

Under which criteria data/document could be used

The request for data is only after the publication of the results by persons working in academic institutions

From where data/document is obtainable

atena.latifi atena.latifi@yahoo.com

What processes are involved for a request to access data/document

after the publication of the results

Comments