Clinical Trial Protocol
Iranian Registry of Clinical Trials

11 Nov 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 200-500µ and pulse durations100ms 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 µm laser spot, and the laser spot spacing of 100 µm were applied.
Category
Treatment - Other

Recruitment centers

1

Recruitment center
Name of recruitment center
Nikukari hospital
Full name of responsible person
Atena Latifi
Street address
Abbasi Ave., Nikukari hospital
City
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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
Street address
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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

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Latest degree
Medical doctor
Other areas of specialty/work
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Person responsible for updating data

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Latest degree
Medical doctor
Other areas of specialty/work
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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