Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 2026

The comparison of endothelial cell changes, pterygium thickness and recurrence rate between preoperative subpterygeal injection of bevacizumab Vs mitomycin C

Protocol summary

Summary

objectives: to compare endothelial cell changes, pterygium thickness and recurrence rate between preoperative subpterygeal injection of bevacizumab Vs mitomycin C Design: Randomized clinical trial setting: Patients with primary pterygium who come to Khatam Eye Hospital between May 2016 to November 2016 were divided to two groups . Participants: Consecutive patients with priamry pterygium without history of previous pterygium surgery,pregnancy,glaucoma and autoimmune disease intervention: 1 month preoperative subpterygeal injection of bevacizumab vs mitomycin C main outcome measures: recurrence rate, endothelial cell changes, pterygium thickness

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016042227525N1**
Registration date: **2016-07-02, 1395/04/12**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2016-07-02, 1395/04/12

Registrant information

Name
Ameneh Karimi
Name of organization / entity
Mashhad University of Medical Sciences
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Iran (Islamic Republic of)
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+98 51 3728 1401
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karimia921@mums.ac.ir

Recruitment status

Recruitment complete

Funding source

Governmental

Expected recruitment start date

2016-05-14, 1395/02/25

Expected recruitment end date

2016-11-20, 1395/08/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The comparison of endothelial cell changes, pterygium thickness and recurrence rate between preoperative subpterygeal injection of bevacizumab Vs mitomycin C

Public title

Preoperative subpterygeal injection of bevacizumab Vs mitomycin C for pterygium surgery

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Primary pterygium Exclusion criteria;: Pregnancy ; history of pterygium surgery; glaucoma; trachoma ; autoimmune disease

Age

No age limit

Gender

Both

Phase

2

Groups that have been masked
No information
Sample size
Target sample size: **50**
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

1

Registry name
.
Secondary trial Id
.
Registration date
2017-11-21, 1396/08/30

Ethics committees

1

Ethics committee
Name of ethics committee
Ethic committe of Mashhad University of Medical Sciences
Street address
Qoreishi Building, Daneshgah St, Mashhad, Iran
City
Mashhad
Postal code
Approval date
2015-09-02, 1394/06/11
Ethics committee reference number
IR.MUMS.fm.REC.13940210

Health conditions studied

1

Description of health condition studied
Pterygium
ICD-10 code
H11.0
ICD-10 code description
Excl.psudopterygium(H11.8)

Primary outcomes

1

Description
Pterygium thickness
Timepoint
Preoperative subpterygeal njection and 1 month after injectin of mitomycin C and bevacizumab
Method of measurement
Anterior segment OCT

2

Description
Endothelial cell count
Timepoint
Preoperative subpterygeal injection and 1 ,3, 6 month after pterygium surgery
Method of measurement
Specular microscopy

Secondary outcomes

1

Description
Recurrence rate of pterygium
Timepoint
6 months after pterygium surgery
Method of measurement
Eye examination with Slit-lamp biomicroscope

Intervention groups

1

Description
Group a: 1month preoperative subpterygeal injection of 0.1 cc mitomycin C
Category
Treatment - Drugs

2

Description
Group b: ۱ month preoperative subpterygeal injection of 0.1 cc bevacizumab
Category
Treatment - Drugs

Recruitment centers

1

Recruitment center
Name of recruitment center
Khatam-Al-Anbia Eye Hospital
Full name of responsible person
Hamid Khakshoor, Professor of Ophthalmology ,Anterior Segment Fellowship
Street address
Khatam-Al-Anbia Eye Hospital , Abutaleb junction, Ghareni Blvd, Mashhad, Iran
City
Mashhad

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Voice Chancellor for Research - Mashhad University of Medical Sciences
Full name of responsible person
Mahyar Mirheydari
Street address
Qoreishi Building , Daneshgah St, Mashhad , Iran
City
Mashhad
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Voice Chancellor for Research - 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
Full name of responsible person
Hamid khakshoor
Position
Professor of ophthalmology , Anterior segment fellowship
Other areas of specialty/work
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Khatam-Al-Anbia Eye Hospital, Abutaleb junction, Ghareni Blvd, Mashhad, Iran
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Person responsible for updating data

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Name of organization / entity
Full name of responsible person
Position
Other areas of specialty/work
Street address
City
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00
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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