

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

05 Jul 2026

### Clinical outcomes of silk sutures versus nylon sutures for suturing of conjunctival autograft in pterygium surgery

#### Protocol summary

##### Summary

Pterygium is a wing-shape fibrovascular lesion of the ocular surface, which is associated with chronic sunlight exposure. As pterygium progress, decreased vision, discomfort and restricted ocular motility can result. Until now, a wide spectrum of treatment strategies have been described for pterygium treatment, including pterygium excision with bare sclera, conjunctival autograft, amniotic membrane transplanted (AMT), adjunctive use of mitomycin-C. Pterygium excision followed by conjunctival autograft has been shown to be a safe and effective procedure for pterygium, with recurrence rates ranging from 2% to 39%. Various suture materials and techniques are employed to secure the autograft, including absorbable and non-absorbable sutures of different diameters. A prospective, randomized, controlled, clinical trial will be conducted, in which 50 eyes of 50 patients with primary nasal pterygium will be randomized to undergo pterygium surgery with the use of nylon sutures or silk sutures for conjunctival autograft suturing. Patients will be followed up for 6 months. Outcome measures included postoperative discomfort according to a visual analogue scale (VAS), graft dehiscence, graft edema, suture loosening and recurrence. All remaining sutures will be removed 2 weeks postoperatively.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT2016100230080N1**

Registration date: **2017-01-13, 1395/10/24**

Registration timing: **retrospective**

Last update:

Update count: **0**

##### Registration date

2017-01-13, 1395/10/24

#### Registrant information

##### Name

Hossein Jamali

##### Name of organization / entity

Shiraz University of Medical Sciences

##### Country

Iran (Islamic Republic of)

##### Phone

+98 71 3230 2830

##### Email address

jamaliho@sums.ac.ir

#### Recruitment status

##### Recruitment complete

#### Funding source

Vice chancellor for research, Shiraz University of Medical Sciences

#### Expected recruitment start date

2015-12-22, 1394/10/01

#### Expected recruitment end date

2016-03-19, 1394/12/29

#### Actual recruitment start date

empty

#### Actual recruitment end date

empty

#### Trial completion date

empty

#### Scientific title

Clinical outcomes of silk sutures versus nylon sutures for suturing of conjunctival autograft in pterygium surgery

#### Public title

Clinical outcomes of silk sutures versus nylon sutures for suturing of conjunctival autograft in pterygium surgery

#### Purpose

Treatment

#### Inclusion/Exclusion criteria

Inclusion criteria: primary nasal pterygium; age 18 years or older and able to co-operate in surgery under local anesthesia  
Exclusion criteria: recurrent pterygium,

temporal or double-head pterygia, scarred superior conjunctiva, previous surgery involving the superior bulbar conjunctiva, history of glaucoma, and/or cicatricial ocular surface disease

#### Age

From **18 years** old to **80 years** old

#### Gender

Both

#### Phase

N/A

#### Groups that have been masked

*No information*

#### Sample size

Target sample size: **50**

#### Randomization (investigator's opinion)

Randomized

#### Randomization description

#### Blinding (investigator's opinion)

Single blinded

#### Blinding description

#### Placebo

Not used

#### Assignment

Parallel

#### Other design features

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Shiraz University of Medical Sciences

##### Street address

Khalili Hospital, Khalili Street, Shiraz

##### City

Shiraz

##### Postal code

7134997446

#### Approval date

2015-12-07, 1394/09/16

#### Ethics committee reference number

IR.SUMS.MED.REC.1394.59

## Health conditions studied

### 1

#### Description of health condition studied

Pterygium

#### ICD-10 code

H11.0

#### ICD-10 code description

Pterygium

## Primary outcomes

### 1

#### Description

Difference in VAS score between the two groups

#### Timepoint

One day after surgery and one week after surgery and two weeks after surgery

#### Method of measurement

Visual analogue scale

## Secondary outcomes

### 1

#### Description

Graft hyperaemia, graft dehiscence, graft edema, suture loosening and recurrence

#### Timepoint

First day and first week and first month and third and sixth months after surgery

#### Method of measurement

Clinical examination and slit photography

## Intervention groups

### 1

#### Description

Silk sutures in intervention group for suturing of autograft conjunctival tissue and will remain for two weeks in the patient's eye

#### Category

Treatment - Surgery

### 2

#### Description

Nylon sutures in intervention group for suturing of autograft conjunctival tissue and will remain for two weeks in the patient's eye

#### Category

Treatment - Surgery

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Khalili Hospital

##### Full name of responsible person

Doctor Hossein Jamali

##### Street address

Khalili Hospital, Khalili Street, Shiraz

##### City

Shiraz

## Sponsors / Funding sources

### 1

#### Sponsor

**Name of organization / entity**

Vice chancellor for research, Shiraz University of Medical Sciences

**Full name of responsible person**

Doctor Seyed Basir Hashemi

**Street address**

Shiraz University of Medical Sciences central building, Zand BLVD, Shiraz, Iran

**City**

Shiraz

**Grant name**

پایان نامه دانشجویی

**Grant code / Reference number**

94-01-01-9194

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

Yes

**Title of funding source**

Vice chancellor for research, Shiraz 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**

Shiraz University of Medical Sciences

**Full name of responsible person**

Doctor Hossein Jamali

**Position**

Anterior Segment Fellowship

**Other areas of specialty/work****Street address**

Shiraz University of Medical Sciences central building, Zand BLVD, Shiraz, Iran

**City**

Shiraz

**Postal code**

7134814336

**Phone**

+98 71 3230 5410

**Fax**

+98 71 3233 7598

**Email**

jamali.md\_opthl@yahoo.com; jamaliho@sums.ac.ir

**Web page address**

Psorc.sums.ac.ir

## Person responsible for scientific inquiries

#### Contact

**Name of organization / entity**

Shiraz University of Medical Sciences

**Full name of responsible person**

Doctor Hossein Jamali

**Position**

Anterior Segment Fellowship

**Other areas of specialty/work****Street address**

Shiraz University of Medical Sciences central building, Zand BLVD, Shiraz, Iran

**City**

Shiraz

**Postal code**

7134997446

**Phone**

+98 71 3230 5410

**Fax**

+98 71 3233 7598

**Email**

jamali.md\_opthl@yahoo.com; jamaliho@sums.ac.ir

**Web page address**

Psorc.sums.ac.ir

## Person responsible for updating data

#### Contact

**Name of organization / entity**

Shiraz University of Medical Sciences

**Full name of responsible person**

Doctor Hossein Jamali

**Position**

Anterior Segment Fellowship

**Other areas of specialty/work****Street address**

Shiraz University of Medical Sciences central building, Zand BLVD, Shiraz, Iran

**City**

Shiraz

**Postal code**

7134997446

**Phone**

+98 71 3230 5410

**Fax**

+98 71 3233 7598

**Email**

jamali.md\_opthl@yahoo.com; jamaliho@sums.ac.ir

**Web page address**

Psorc.sums.ac.ir

## 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*