

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

17 Sep 2026

### Comprehensive Analysis of Effectiveness and Complications of Lateral Matricectomy With Phenol 90%, TCA 100% & RF in Patients With Ingrown Toenail

#### Protocol summary

##### Study aim

Comprehensive Analysis of Effectiveness and Complications of Lateral Matricectomy With Phenol 90%, TCA 100% & RF in Patients With Ingrown Toenail

##### Design

Three Parallel Group Randomized Clinical Trail With Blinded Outcome Assessment, Randomization Will be Conducted Using a Table of Random Numbers. Number of Patients Will be 12 and These Patients Will Be Followed For Six Months.

##### Settings and conduct

The Patients With Ingrown Toenail Who Are Volunteer to Participate in the Research Will Be Surgically Operated on in the Dermatology Clinic of Rasool Akram Hospital of Tehran. Each of the Patients Will Randomly Receive One of the Lateral Matricectomy Treatment Methods With Phenol 90%, TCA 100% or Radio Frequency. Since This Study Is a Single-Blind, Patients Will Be Unaware of the Details of the Method Used For Their Treatment.

##### Participants/Inclusion and exclusion criteria

Patients With Grades 2 and 3 Ingrown Toenail

##### Intervention groups

lateral Matricectomy With Phenol 90%, TCA 100% & RF

##### Main outcome variables

Treatment Modality; Post Surgery Infection; Post Surgery Drainage; Recurrence; Cosmetic Effect; Pain

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20220228054152N1**

Registration date: **2023-01-03, 1401/10/13**

Registration timing: **retrospective**

Last update: **2023-01-03, 1401/10/13**

Update count: **0**

##### Registration date

2023-01-03, 1401/10/13

##### Registrant information

###### Name

Zahra Keshavarz

###### Name of organization / entity

###### Country

Iran (Islamic Republic of)

###### Phone

+98 71 3731 1221

###### Email address

s.zahrakeshavarz@gmail.com

##### Recruitment status

###### Recruitment complete

##### Funding source

##### Expected recruitment start date

2022-09-23, 1401/07/01

##### Expected recruitment end date

2022-10-23, 1401/08/01

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Comprehensive Analysis of Effectiveness and Complications of Lateral Matricectomy With Phenol 90%, TCA 100% & RF in Patients With Ingrown Toenail

##### Public title

Comprehensive Analysis of Effectiveness and Complications of Lateral Matricectomy in Patients With Ingrown Toenail

##### Purpose

Treatment

**Inclusion/Exclusion criteria**

**Inclusion criteria:**

Patients With Ingrown Toenail

**Exclusion criteria:**

Patients With Diabetes Melitus, Venous Insufficiency, Platelet or Coagulation Disorders

**Age**

From **16 years** old to **65 years** old

**Gender**

Both

**Phase**

N/A

**Groups that have been masked**

- Participant

**Sample size**

Target sample size: **12**

**Randomization (investigator's opinion)**

Randomized

**Randomization description**

A Simple Random Sampling Method Will Be Used. Treatment Candidates Will Be Placed In One of the Three Treatment Groups (i.e., Phenol 90%, TCA 100% and Radio Frequency) Using the Table of Random Numbers.

**Blinding (investigator's opinion)**

Single blinded

**Blinding description**

Since the Entire Treatment Process Will Be Carried Out By the Researcher (With the Supervision of the Thesis Committee), and the Healthcare Providers Have No Intervention, Only the Patients With Ingrown Toenail Will Be Blind. In This Regard, After Receiving the Patient's Consent, One of the Three Studied Treatment Methods Will Be Used to Treat the Patient. To Avoid Research Bias, Explanations about the Name and Details of the Treatment Method Will Not Provided to the Patients.

**Placebo**

Not used

**Assignment**

Parallel

**Other design features**

## Secondary Ids

empty

## Ethics committees

1

### Ethics committee

#### Name of ethics committee

Ethics committee of Iran University of Medical Sciences

#### Street address

Shahid Hammat Highway, Hammat Gharb, Between the Intersection of Sheikh Fazlullah Nouri and Shahid Chamran, Iran University of Medical Sciences and Health Services

#### City

Tehran

#### Province

Tehran

#### Postal code

1449614535

#### Approval date

2021-08-01, 1400/05/10

#### Ethics committee reference number

IR.IUMS.FMD.REC.1400.310

## Health conditions studied

1

### Description of health condition studied

Ingrown Toenail

#### ICD-10 code

L60.0

#### ICD-10 code description

Ingrowing nail

## Primary outcomes

1

### Description

Cure Rate of Ingrown Toenail

### Timepoint

2, 14, 30, 60, 180 days after surgery

### Method of measurement

Questionnaire and Photography

## Secondary outcomes

empty

## Intervention groups

1

### Description

In This Research, Three Intervention Groups (i.e., Different Treatment Modals) Will Be Compared. All Groups Are Randomly Selected. The First Intervention Group will be Surgically Operated by Lateral Matricectomy Using Phenol 90% . The Second Intervention Group Will Be Treated With Lateral Matricectomy and TCA 100% . For the Treatment of The Third Intervention Group, The Lateral Matricectomy and Radiofrequency Will Be Used.

### Category

Treatment - Surgery

## Recruitment centers

1

### Recruitment center

#### Name of recruitment center

Rasool Akram hospital

#### Full name of responsible person

Zahra Keshavarz

**Street address**

Rasool Akram hospital, Maziar Mansuri Aven., Satar  
Khan St.

**City**

Tehran

**Province**

Tehran

**Postal code**

1445613131

**Phone**

+98 937 493 5066

**Email**

s.zahrakeshavarz@gmail.com

## Sponsors / Funding sources

### 1

**Sponsor**

**Name of organization / entity**

Iran University of Medical Sciences

**Full name of responsible person**

Kazem Mousavizadeh

**Street address**

Rasool Akram hospital, Maziar Mansuri Ave., Satar  
khan St.

**City**

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**Phone**

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**Email**

mousavizadeh.k@iums.ac.ir

**Grant name**

**Grant code / Reference number**

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

Yes

**Title of funding source**

Iran 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**

Iran University of Medical Sciences

**Full name of responsible person**

Zahra Keshavarz

**Position**

resident

**Latest degree**

Medical doctor

**Other areas of specialty/work**

Dermatology

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## Person responsible for scientific inquiries

**Contact**

**Name of organization / entity**

Iran University of Medical Sciences

**Full name of responsible person**

Zahra Keshavarz

**Position**

resident

**Latest degree**

Medical doctor

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## Person responsible for updating data

**Contact**

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Iran University of Medical Sciences

**Full name of responsible person**

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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**

No - There is not a plan to make this available

**Title and more details about the data/document**

Part of the data, such as the consequences of using each  
of the materials in surgery, the study protocol, statistical  
analysis, the informed consent form, the study report  
and the codes used for analysis are shared.

**When the data will become available and for how long**

The access period starts 6 months after results  
publication

**To whom data/document is available**

Researchers working in academic and scientific  
institutions

**Under which criteria data/document could be used**

If an official application is sent and permission is  
obtained, data usage is possible.

**From where data/document is obtainable**

All the Documents and Data of This Research Are  
Available to The Thesis Supervisor. Applicants Can  
Access These Documents By Referring to The  
Dermatology Clinic of Rasoul Akram Hospital in Tehran.  
In Addition, Applicants Can Submit Their Requests to  
zahrakeshavarz@gmail.com.

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

The data will be sent no later than two weeks after  
receiving the application and verifying the identity of the  
applicant.

**Comments**