

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

09 Jun 2026

### Comparison of pain after surgery between two methods of hemorrhoidectomy Milligan-Morgan and Ferguson in patients with grade 3 and 4 hemorrhoid

#### Protocol summary

##### Study aim

comparison between two methods of hemorrhoidectomy including Milligan-Morgan and Ferguson in patient with hemorrhoid degree 3 or 4

##### Design

randomized; clinical trial with two parallel groups design of 60 patients

##### Settings and conduct

After selecting sixty patients with hemorrhoids, patients who are referred to the clinic of Razi Hospital and confirmed the necessity for surgery, are randomly divided into two groups of thirty patients, one of the groups will be undergoing the Ferguson hemorrhoidectomy and the other group will be undergoing Milligan-Morgan hemorrhoidectomy. These patients will be monitored for one month to check the outcomes and possible post-operative complication and they will be examined at least once

##### Participants/Inclusion and exclusion criteria

inclusion criteria: patient's age between 18 to 60; patients with internal hemorrhoid (third or fourth grade) or complex hemorrhoid; exclusion criteria: thrombosed hemorrhoid; addiction; history of anorectal surgery; anal fissure or fistula

##### Intervention groups

including two groups that one them operate by Milligan-Morgan method and the other one operates by Ferguson method

##### Main outcome variables

pain in first, second and third day after surgery, length of stay in the hospital, amount of bleeding, infection, time to back to work

#### General information

##### Reason for update

##### Acronym

#### IRCT registration information

IRCT registration number: **IRCT20180516039681N1**

Registration date: **2018-10-26, 1397/08/04**

Registration timing: **registered\_while\_recruiting**

Last update: **2018-10-26, 1397/08/04**

Update count: **0**

#### Registration date

2018-10-26, 1397/08/04

#### Registrant information

##### Name

Soroosh Aghaei

##### Name of organization / entity

##### Country

Iran (Islamic Republic of)

##### Phone

+98 71 3732 5872

##### Email address

sorooshaghaee@yahoo.com

#### Recruitment status

**Recruitment complete**

#### Funding source

#### Expected recruitment start date

2018-07-23, 1397/05/01

#### Expected recruitment end date

2019-04-21, 1398/02/01

#### Actual recruitment start date

empty

#### Actual recruitment end date

empty

#### Trial completion date

empty

#### Scientific title

Comparison of pain after surgery between two methods of hemorrhoidectomy Milligan-Morgan and Ferguson in

patients with grade 3 and 4 hemorrhoid

### Public title

Comparison between open and closed hemorrhoidectomy

### Purpose

Treatment

### Inclusion/Exclusion criteria

#### Inclusion criteria:

Internal hemorrhoid grade 3 or 4 Internal hemorrhoid or complex Age between 18 to 60

#### Exclusion criteria:

History of previous anorectal surgery Thrombosed hemorrhoid Addictoin Anal fissure or fistula

### Age

From **18 years** old to **60 years** old

### Gender

Both

### Phase

N/A

### Groups that have been masked

*No information*

### Sample size

Target sample size: **60**

### Randomization (investigator's opinion)

Randomized

### Randomization description

Randomization was done by random number table

### Blinding (investigator's opinion)

Not blinded

### Blinding description

#### Placebo

Not used

#### Assignment

Other

### Other design features

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

ethic committee of ahvaz university of medical sciences

##### Street address

ahvaz jundishapur university of medical sciences;golestan blvd

##### City

ahvaz

##### Province

Khuzestan

##### Postal code

6137515794

#### Approval date

2017-12-24, 1396/10/03

#### Ethics committee reference number

IR.AJUMS.REC.1397.105

## Health conditions studied

### 1

#### Description of health condition studied

methods of hemorrhoidectomy

#### ICD-10 code

K64.9

#### ICD-10 code description

Unspecified hemorrhoids

## Primary outcomes

### 1

#### Description

pain

#### Timepoint

pain in first,second and third day after surgery

#### Method of measurement

visual analog scale

### 2

#### Description

length of stay in the hospital

#### Timepoint

after the surgery

#### Method of measurement

counting length of stay

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

Intervention group: undergoing Ferguson hemorrhoidectomy, in which the skin and mucus are completely closed by suturing.

#### Category

Treatment - Surgery

### 2

#### Description

Intervention group: Undergoing Miligan-Morgan hemorrhoidectomy in which skin ulcer is left open

#### Category

Treatment - Surgery

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

razi hospital

##### Full name of responsible person

neda najibpour  
**Street address**  
razi hospital,felestin st,amanie ave,  
**City**  
ahvaz  
**Province**  
Khouzestan  
**Postal code**  
6196514941  
**Phone**  
+98 61 3333 5935  
**Email**  
nnajibpour@yahoo.com

associate professor  
**Latest degree**  
Subspecialist  
**Other areas of specialty/work**  
General Surgery  
**Street address**  
razi hospital,felestin st,amanie ave  
**City**  
Ahvaz  
**Province**  
Khouzestan  
**Postal code**  
6196514941  
**Phone**  
+98 61 3333 5935  
**Email**  
nnajibpour@yahoo.com

## Sponsors / Funding sources

### 1

#### Sponsor

**Name of organization / entity**  
Ahvaz University of Medical Sciences  
**Full name of responsible person**  
mohammad badavi  
**Street address**  
Ahvaz jundishapur medical science, Golestan Blvd,  
**City**  
Ahvaz  
**Province**  
Khouzestan  
**Postal code**  
6137515794  
**Phone**  
+98 61 3336 2414  
**Email**  
itc@ajums.ac.ir  
**Grant name**  
**Grant code / Reference number**  
**Is the source of funding the same sponsor organization/entity?**  
Yes  
**Title of funding source**  
Ahvaz 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**  
Ahvaz University of Medical Sciences  
**Full name of responsible person**  
neda najibpour  
**Position**

## Person responsible for scientific inquiries

#### Contact

**Name of organization / entity**  
Ahvaz University of Medical Sciences  
**Full name of responsible person**  
neda najibpour  
**Position**  
associate professor  
**Latest degree**  
Subspecialist  
**Other areas of specialty/work**  
General Surgery  
**Street address**  
razi hospital,felestin st,amanie ave  
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**Province**  
Khouzestan  
**Postal code**  
6196514941  
**Phone**  
+98 61 3333 5935  
**Email**  
nnajibpour@yahoo.com

## Person responsible for updating data

#### Contact

**Name of organization / entity**  
Ahvaz University of Medical Sciences  
**Full name of responsible person**  
Soroosh Aghaei  
**Position**  
Medical student  
**Latest degree**  
Medical doctor  
**Other areas of specialty/work**  
General Surgery  
**Street address**  
No. 3, East kianpars  
**City**  
Ahvaz

**Province**

Khouzestan

**Postal code**

6155934559

**Phone**

+98 71 3732 5872

**Fax****Email**

Sorooshaghaee@yahoo.com

**Sharing plan****Deidentified Individual Participant Data Set (IPD)**

Undecided - It is not yet known if there will be a plan to make this available

**Study Protocol**

Undecided - It is not yet known if there will be a plan to make this available

**Statistical Analysis Plan**

Undecided - It is not yet known if there will be a plan to make this available

**Informed Consent Form**

Undecided - It is not yet known if there will be a plan to make this available

**Clinical Study Report**

Undecided - It is not yet known if there will be a plan to make this available

**Analytic Code**

Undecided - It is not yet known if there will be a plan to make this available

**Data Dictionary**

Not applicable