

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

30 Jun 2026

### Comparison of the effect of retention and routine sutures on wound dehiscence in patients candidate for emergent abdominal laparotomy

#### Protocol summary

##### Summary

Objectives: The purpose of this study is to evaluate the effect of retention sutures on wound dehiscence following emergent abdominal laparotomy. Design: Block randomization, with control group, trial phase 2, including 160 patients under emergent abdominal laparotomy due to peritonitis or trauma. Setting and conduct: Fascia is continuously repaired using a running looped #1 nylon suture. Participants including major eligibility criteria: 160 patients under emergent abdominal laparotomy due to peritonitis or trauma. Intervention: Retention sutures that included the skin, subcutaneous tissue, rectus muscle, and abdominal fascia. Main outcome measures: Wound dehiscence, duration of hospitalization, number of ICU admissions.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT2015052322385N1**

Registration date: **2015-07-11, 1394/04/20**

Registration timing: **retrospective**

Last update:

Update count: **0**

##### Registration date

2015-07-11, 1394/04/20

##### Registrant information

###### Name

Maryam Panahi

###### Name of organization / entity

Arak University of Medical Sciences

###### Country

Iran (Islamic Republic of)

###### Phone

+98 86 3417 3506

##### Email address

m.panahi@arakmu.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

Arak University of Medical Sciences, Vice Chancellor for Research

##### Expected recruitment start date

2014-09-23, 1393/07/01

##### Expected recruitment end date

2015-06-22, 1394/04/01

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Comparison of the effect of retention and routine sutures on wound dehiscence in patients candidate for emergent abdominal laparotomy

##### Public title

Effect of retention sutures on wound dehiscence of abdominal surgery

##### Purpose

Prevention

##### Inclusion/Exclusion criteria

Inclusion criteria: patients under emergent abdominal laparotomy due to peritonitis or trauma; The minimum length of 10 cm for incision surgery; Having two known risk factor for wound dehiscence. Exclusion criteria: Patients who died within two weeks after surgery.

##### Age

No age limit

##### Gender

Both

##### Phase

2

## Groups that have been masked

No information

## Sample size

Target sample size: 160

## Randomization (investigator's opinion)

Randomized

## Randomization description

## Blinding (investigator's opinion)

Not blinded

## Blinding description

## Placebo

Not used

## Assignment

Parallel

## Other design features

Patients will be divided into 2 groups by block randomization.

## Secondary Ids

empty

## Ethics committees

1

### Ethics committee

#### Name of ethics committee

Ethics committee of Arak University of Medical Sciences

#### Street address

Arak University of Medical Sciences. Basij Square. Sardasht. Arak. Iran

#### City

Arak

#### Postal code

#### Approval date

2014-09-23, 1393/07/01

#### Ethics committee reference number

92-157-4

## Health conditions studied

1

### Description of health condition studied

Open wound

### ICD-10 code

S31.1

### ICD-10 code description

Open wound of abdominal wall

## Primary outcomes

1

### Description

Wound dehiscence

### Timepoint

In days 2, 7, and 14 after discharge

### Method of measurement

Wound examination

2

### Description

Duration of hospitalization

### Timepoint

From the onset of study since the discharge

### Method of measurement

Number of days of hospitalization

## Secondary outcomes

empty

## Intervention groups

1

### Description

Intervention group 1: Retention sutures that included the skin, subcutaneous tissue, rectus muscle, and abdominal fascia.

### Category

Prevention

2

### Description

Control group: Without retention sutures.

### Category

Treatment - Other

## Recruitment centers

1

### Recruitment center

#### Name of recruitment center

Vali asr hospital

#### Full name of responsible person

Maryam Panahi

#### Street address

Vali asr hospital. Vali asr square. Arak. Iran

#### City

Arak

## Sponsors / Funding sources

1

### Sponsor

#### Name of organization / entity

Arak University of Medical Sciences, Vice Chancellor for Research

#### Full name of responsible person

Dr Ali Asghar Yaghoobi

#### Street address

Arak University of Medical Sciences. Basij Square. Sardasht. Arak. Iran

#### City

Arak

**Grant name**  
**Grant code / Reference number**  
**Is the source of funding the same sponsor organization/entity?**  
Yes  
**Title of funding source**  
Arak University of Medical Sciences, Vice Chancellor for Research  
**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**  
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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*