

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### Assessing the effect of closed suction drainage by using of prosthesis (Lichtenstein technique) in preventing wound complications following inguinal hernioplasty in Amir-Al-Momenin hospital, Semnan, 2013

#### Protocol summary

##### Summary

Aims There are several methods to prevent or to drain seroma. We aimed to assess effects of closed suction drainage system insertion in preventing of wound complications.. Design of the study: In a clinical trial, 42 patients with primary inguinal hernia candidate for hernioplasty by using of prosthetic who underwent surgery to repair for first time were enrolled and randomly divided into two groups. The main inclusion and exclusion criteria: Inclusion criteria: Patients with primary inguinal hernia, having good condition for surgery under general anesthesia. Exclusion criteria: Recurrent hernia. Sample size: 42 patients with primary inguinal hernia who divided into two groups. Interventions: 21 patients underwent hernia surgery without drains and 21 others with closed suction drainage system. In the first group after hernia repair with prosthesis (Lichtenstein technique) do not used any drains, and in other group closed suction drainage was established. Patients were evaluated 24 hours after surgery in the hospital, and 4-7 days and 10-15 days after surgery in clinic for complications including the formation of seroma, hematoma and wound infection or other complications. Time of intervention: In the end of surgery in operating room. Study outcomes: Decreasing of wound complications.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT2014120118168N2**

Registration date: **2014-12-19, 1393/09/28**

Registration timing: **retrospective**

Last update:

Update count: **0**

##### Registration date

2014-12-19, 1393/09/28

##### Registrant information

###### Name

Hamid Reza Hemmati

###### Name of organization / entity

Semnan University of Medical Sciences

###### Country

Iran (Islamic Republic of)

###### Phone

+98 23 3343 7822

###### Email address

dr.hahemmati@semums.ac.ir

##### Recruitment status

###### Recruitment complete

##### Funding source

Vice Chancellor for Research and Technology, Semnan University of Medical Sciences

##### Expected recruitment start date

2013-03-21, 1392/01/01

##### Expected recruitment end date

2014-03-20, 1392/12/29

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Assessing the effect of closed suction drainage by using of prosthesis (Lichtenstein technique) in preventing wound complications following inguinal hernioplasty in Amir-Al-Momenin hospital, Semnan, 2013

##### Public title

Assessing the effect of closed suction drainage in

preventing wound complications following inguinal hernioplasty by using of prosthesis.

**Purpose**

Treatment

**Inclusion/Exclusion criteria**

Inclusion criteria: Patients with primary inguinal hernia, Having good condition for surgery under general anesthesia. Exclusion criteria: Recurrent hernia.

**Age**

No age limit

**Gender**

Both

**Phase**

3

**Groups that have been masked**

No information

**Sample size**

Target sample size: 42

**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**

empty

**Ethics committees****1****Ethics committee****Name of ethics committee**

Ethical Committee, Semnan University of Medical Sciences

**Street address**

Basidj Boulevard

**City**

Semnan

**Postal code****Approval date**

2014-03-08, 1392/12/17

**Ethics committee reference number**

93/564791 Date:16/12/1392

**Health conditions studied****1****Description of health condition studied**

Surgical Wound Complications

**ICD-10 code**

T81.4

**ICD-10 code description**

Infection following a procedure, not elsewhere classified

**Primary outcomes****1****Description**

Surgical Wound Complications

**Timepoint**

24 Hours, 4-7 days and 10-15 days after surgery

**Method of measurement**

Examination, Inspection and drainage culture

**Secondary outcomes****1****Description**

Fever and tenderness around the surgical wound

**Timepoint**

24 hours, 4-7 and 10-15 days after surgery

**Method of measurement**

Examination and Inspection

**Intervention groups****1****Description**

21 patients as control group were undergoing hernia surgery that repair with prosthesis (Liechtenstein technique) without insertinf of drains.

**Category**

Treatment - Surgery

**2****Description**

21 patients as intervention group underwent hernia surgery with prosthesis (Liechtenstein technique) and closed suction drainage system was established after at the incision

**Category**

Treatment - Surgery

**Recruitment centers****1****Recruitment center****Name of recruitment center**

Amir-Al-Mimemin Hospital

**Full name of responsible person**

Dr. Hamidreza Hemmati

**Street address**

Imam Hussein square

**City**

Semnan

## Sponsors / Funding sources

1

### Sponsor

**Name of organization / entity**

Vice Chancellor for Research and Technology,  
Semnan University of Medical Sciences

**Full name of responsible person**

Mohammadreza Asgari

**Street address**

Basidj Boulevard

**City**

Semnan

**Grant name**

**Grant code / Reference number**

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

Yes

**Title of funding source**

Vice Chancellor for Research and Technology, Semnan  
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**

Semnan University of Medical Sciences

**Full name of responsible person**

Dr. Hamidreza Hemmati

**Position**

Torasic Surgeon/ Assistant Professor

**Other areas of specialty/work**

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## Person responsible for updating data

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Mehrdad Zahmatkesh

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Nurse BSN, Resarch Expert

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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*