

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

02 Jun 2026

### Evaluating the results of treatment in unstable femoral neck fractures with method of augmentation cannulated screw with medial buttress plate.

#### Protocol summary

##### Study aim

Increase level of success in surgery of unstable femoral neck fracture in young patients. Reduce of re-operation

##### Design

A clinical trial with no parallel group with no randomization. enrolled between 2018 and 2021.and followed for 6 months.

##### Settings and conduct

Mashhad kamyab hospital and Emam reza hospital. After inability to Close reduction, open reduction was done with smith peterson approach and apply cannulated screw and then apply medial buttress plate.

##### Participants/Inclusion and exclusion criteria

Inclusion criteria: Inability to close reduction in type 2 and 3 of the Pauwels classification of femoral neck fracture in patient between 18-60 years old. Exclusion criteria: ability to close reduction, ipsilateral fracture, type 1

##### Intervention groups

Application of buttress medial plate in a patient with unstable femoral neck fracture(type 2,3) after open reduction and fixation with a cannulated screw.

##### Main outcome variables

The rate of the union in femoral neck fracture surgery  
The need for re-operation

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20201108049314N1**

Registration date: **2020-12-13, 1399/09/23**

Registration timing: **retrospective**

Last update: **2020-12-13, 1399/09/23**

Update count: **0**

##### Registration date

2020-12-13, 1399/09/23

##### Registrant information

###### Name

Ghasem Zamani

###### Name of organization / entity

###### Country

Iran (Islamic Republic of)

###### Phone

+98 51 3713 1292

###### Email address

ghasem.zamani92@gmail.com

##### Recruitment status

###### Recruitment complete

##### Funding source

##### Expected recruitment start date

2019-08-23, 1398/06/01

##### Expected recruitment end date

2020-11-05, 1399/08/15

##### Actual recruitment start date

2019-08-23, 1398/06/01

##### Actual recruitment end date

2020-11-05, 1399/08/15

##### Trial completion date

2021-03-19, 1399/12/29

##### Scientific title

Evaluating the results of treatment in unstable femoral neck fractures with method of augmentation cannulated screw with medial buttress plate.

##### Public title

Evaluating the result of medial buttress plate in unstable femoral neck fracture.

##### Purpose

Treatment

##### Inclusion/Exclusion criteria

**Inclusion criteria:**

Unstable femoral neck fractures in which close reduction is not applicable Type 2, 3 in pauwels classification

**Exclusion criteria:**

Possibility of close reduction, Type 1 in pauwels classification

**Age**

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

**Gender**

Both

**Phase**

N/A

**Groups that have been masked**

*No information*

**Sample size**

Target sample size: **8**

Actual sample size reached: **8**

**Randomization (investigator's opinion)**

N/A

**Randomization description****Blinding (investigator's opinion)**

Not blinded

**Blinding description****Placebo**

Not used

**Assignment**

Single

**Other design features****Secondary Ids**

empty

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

Ethics Committee of Mashhad University of Medical Sciences

**Street address**

No 342.Kolahdouz 17/1 Blvd.

**City**

Mashhad

**Province**

Razavi Khorasan

**Postal code**

9184944111

**Approval date**

2020-10-12, 1399/07/21

**Ethics committee reference number**

IR.MUMS.MEDICAL.REC.1399.398

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

Unstable femoral neck fracture

**ICD-10 code**

S72.00

**ICD-10 code description**

Fracture of unspecified part of neck of femur

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

Union

**Timepoint**

2 weeks , 6weeks, 12 weeks, 6 months

**Method of measurement**

Pelvic x-ray, History and physical examination

**Secondary outcomes**

empty

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

Intervention group: application of buttress medial plate in a patient with unstable femoral neck fracture(type 2,3) after open reduction and fixation with a cannulated screw.

**Category**

Treatment - Surgery

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

Kamyab hospital, Mashhad

**Full name of responsible person**

Ghasem Zamani

**Street address**

Fadaeeyan Eslam.

**City**

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**Province**

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1111111111

**Phone**

+98 51 3880 0280

**Email**

Ghasem.zamani92@gmail.com

**Sponsors / Funding sources****1****Sponsor****Name of organization / entity**

Mashhad University of Medical Sciences

**Full name of responsible person**

Mohsen Tafaghodi

**Street address**

Knowledge and Health City, Shahid Fakouri 94 Ave.,  
Shahid Fakouri Blvd., Mashhad ,Iran

**City**

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**Province**

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**Phone**

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**Email**

Mds.research@mums.ac.ir

**Grant name**

**Grant code / Reference number**

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

Yes

**Title of funding source**

Mashhad 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**

Mashhad University of Medical Sciences

**Full name of responsible person**

Ghasem Zamani

**Position**

Resident

**Latest degree**

Specialist

**Other areas of specialty/work**

Orthopedics

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**Person responsible for scientific**

**inquiries**

**Contact**

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**Person responsible for updating data**

**Contact**

**Name of organization / entity**

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**Full name of responsible person**

Ghasem Zamani

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**Email**

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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**

Yes - There is a plan to make this available

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

Pelvic x-ray Physical examinations according to Harris hip score and Merle Questionnaires

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

Access at the end of study

**To whom data/document is available**

Academic and industry Researchers

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

Any researcher can access information by having a letter of introduction from the relevant organization, including industry and academia.

**From where data/document is obtainable**

Ghasem Zamani Ghasem.zamani92@gmail.com  
00989153062925

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

Sending a request with a letter of introduction from the relevant organization to the phone number or email

**Comments**