Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

A Novel Minimally Invasive Approach for Anterior Pelvic Ring fracture Fixation in patients with pelvic fracture

Protocol summary

Study aim
introduce the MIAPF as a situated approach for ant pelvic ring fractures

Design
a clinical trial which has control group and parallel groups without blindness.

Settings and conduct
In our study, 18 patients who refered to akhtar hopital from 2016 to 2019 .The MIAPF started with a transversely 1 inch-long incision over the pubic symphysis. With the intact abdominal rectus muscle, the position and path of screw was defined and optimized with a 2.7 mm drill bit with the help of C-ARM fluoroscopic 2D images. A 3 hole reconstruction palte was fixed in the pubic budy of the intact side with two 3.5 mm cortical screws. Then a long cortical screw (Synthes, Switzerland) was placed in the fracture site according to the previously-planed path with drill bit. The length of the screws varied from 80 to120 mm, depending on the anatomy of the patient’s pelvis. If bilateral anterior pelvic fracture was present, then two long cortical screws (Synthes, Switzerland) were placed in bilateral fracture sites.After placing the screws and plate, a C-ARM fluoroscopy was again used to verify the position of plate and appropriate length of the screws.

Participants/Inclusion and exclusion criteria
inclusion: patients with ant pelvic ring fractures that are nearby the symphysis nakatani classification type1 exclusion: fractures away from pubic symphysis or nakatani classification type 2 or 3 patients dosent accept this method

Intervention groups
all patients who refered to akhtar hospital with ant pelvic ring fractures that were nearby the pubic symphysis from 21.3.2015 control: patients dosent accept this procedure and treated with previous method

Main outcome variables
time of suegery . blood loss. infection rate

General information

Reason for update

Acronym
MIAPF

IRCT registration information
IRCT registration number: **IRCT20191210045682N1**
Registration date: **2020-04-09, 1399/01/21**
Registration timing: **retrospective**

Last update: **2020-04-09, 1399/01/21**
Update count: **0**

Registration date
2020-04-09, 1399/01/21

Registrant information

Name
aliasghar alamian

Name of organization / entity

Country
Iran (Islamic Republic of)

Phone
+98 21 8803 1255

Email address
shahramalamian@gmail.com

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2015-03-21, 1394/01/01

Expected recruitment end date
2019-12-21, 1398/09/30

Actual recruitment start date
2015-03-30, 1394/01/10

Actual recruitment end date
2019-12-21, 1398/09/30

Trial completion date
2019-12-21, 1398/09/30

Scientific title
A Novel Minimally Invasive Approach for Anterior Pelvic Ring fracture Fixation in patients with pelvic fracture

Public title
a less invasive surgery for pelvic fracture
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria:
pelvic fracture which is nearby the symphisis fractures that include classification nakatani type 1
Exclusion criteria:
fractures which are nakatani type 2 or 3 patient dosent accept this surgery fractures with comminution of ramus that cant be fixed with this procedure
Age
No age limit
Gender
Both

Phase
2
Groups that have been masked
No information
Sample size
Target sample size: **18**
Actual sample size reached: **18**
Randomization (investigator's opinion)
N/A
Randomization description
Blinding (investigator's opinion)
Not blinded
Blinding description
Placebo
Not used
Assignment
Parallel
Other design features
low blood loss - minor incision- better recovery- low pain after surgery

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
ethics committee of shahid beheshti university of medical science
Street address
sheykh bahaie. ghavam pour.
City
tehran
Province
Tehran
Postal code
1995758464
Approval date
2019-03-12, 1397/12/21
Ethics committee reference number
ir.sbmu.msp.rec.1397.799

Health conditions studied

1

Description of health condition studied
anterior pelvic ring fracture
ICD-10 code
M00-M99
ICD-10 code description
Biomechanical lesions, not elsewhere classified, Pyogenic arthritis

Primary outcomes

1

Description
bleeding amount in this method.
Timepoint
during surgery
Method of measurement
volume of suction& number of strile gauze

2

Description
infection rate after surgery
Timepoint
after 1and 2 week.3month. 1year
Method of measurement
physical exame

3

Description
duration time of surgery.
Timepoint
during surgery
Method of measurement
record by surgery nurse

Secondary outcomes

1

Description
a smaller incision
Timepoint
during surgery
Method of measurement
ruller

2

Description
lower pain
Timepoint
just after surgery 1.2 weeks after that

Method of measurement
patients scoring 1to 10

Intervention groups

1

Description
Intervention group: patients who were refered to akhtar hospital with ant.pelvic ring fx. in our study:Under general or local anesthesia, patients were positioned on a radio-transparent operation table in the supine position. Preparation and drape of the skin was from above the umbilicus to the upper third of the lower extremities. The MIAPF started with a transversely 1-inch-long incision over the pubic symphysis. With the intact abdominal rectus muscle, the position and path of screw was defined and optimized with a 2.7 mm drill bit with the help of C-ARM fluoroscopic 2D images.A 3-hole reconstruction plate was fixed in the pubis body of the intact side with two 3.5 mm cortical screws. Then a long cortical screw (Synthes, Switzerland) was placed in the fracture site according to the previously-planed path with drill bit. The length of the screws varied from 80 to 120 mm, depending on the anatomy of the patient’s pelvis. If bilateral anterior pelvic fracture was present, then two long cortical screws (Synthes, Switzerland) were placed in bilateral fracture sites through three hole reconstruction plate.
Category
Treatment - Surgery

2

Description
Control group: control group was the patients who dosent accept this technique and treated with previouse procedures.the fan incision& fixation with bigger plate and screw
Category
Treatment - Surgery

Recruitment centers

1

Recruitment center
Name of recruitment center
akhtar hospital
Full name of responsible person
ali asghar alamian
Street address
shariaty blvd. sharifi manesh ave. azar sreet
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Fax
Email
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Web page address

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
akhtar bone and joint research center
Full name of responsible person
seyyed mohammad qoreishy
Street address
sharifimanesh ave
City
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Postal code
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shahramalamian@gmail.com
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
No
Title of funding source
akhtar hospital
Proportion provided by this source
100
Public or private sector
Private
Domestic or foreign origin
Domestic
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
Persons

Person responsible for general inquiries

Contact
Name of organization / entity
Shahid Beheshti University of Medical Sciences
Full name of responsible person
seyyed mohammad qureishy
Position
assistant professor
Latest degree
Subspecialist
Other areas of specialty/work
Orthopedics
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Person responsible for updating data

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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
Undecided - It is not yet known if there will be a plan to make this available
Clinical Study Report
Yes - There is a plan to make this available
Analytic Code
Not applicable
Data Dictionary
Undecided - It is not yet known if there will be a plan to make this available
Title and more details about the data/document
bleeding. time of surgery. complication of surgery
When the data will become available and for how long
any time
To whom data/document is available
orthopaedic student. orthopaedic surgion
Under which criteria data/document could be used
to compare with other method of surgery of pelvic ring fx
From where data/document is obtainable
by Email from ali asghar alamian or seyyed mohammad qoerishy
What processes are involved for a request to access data/document
email or phone call
Comments