Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Comparative study of Quadratus lumborum and Fascin illiaca nerve blocks on intraoperative narcotic use and postoperative analgesia criteria in acetabulum fracture surgeries by Stoppa method

Protocol summary

Study aim
Comparison of Quadratus and Fascin illiaca nerve blocks on the amount of drug used during surgery and postoperative analgesia criteria in acetabular fracture surgeries by Stoppa method

Design
Clinical trial with parallel groups, non-randomized, on 40 patients

Settings and conduct
The present study was a clinical trial without blinding. After obtaining written consent, patients are transferred to a block room to perform a nerve block. After obtaining a suitable venous line and receiving a crystalloid product, and during hemodynamic monitoring and oxygen administration through a pink mask, as well as receiving fentanyl and midazolam.

Participants/Inclusion and exclusion criteria
Inclusion criteria: age 20 to 75 years, ASA class I and II, acetabular fracture, elective surgery by Stoppa method, insensitivity to anesthetic drugs, no psychiatric illness, no drug addiction, no fracture with trauma, weight Less than 85 kg

Intervention groups
Patients of Fascialiaca block group (FIB): A high frequency linear probe (10-25 MHz) of ultrasound device is used which is placed horizontally in the inguinal area and in-plane method with B Braun needle at a rate of 3 ml / kg 0. and a maximum of 30 ml of 0.5% rupivacaine is injected with direct vision between the iliac fascia and the iliopsoas muscle. Patients in the QL group: Curanasus lumbormum 1 (QL1) or lateral Quartus lumbumum block is used with the help of Needle 22 Braun rupivacaine 0.5% at a rate of 0.3 ml / g and up to 30 ml at the lateral termination of the abdominis transverse muscle. And is done with precise hyperdissection.

Main outcome variables
Pain, blood pressure, heart rate, morphine intake after surgery, fentanyl intake during surgery

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20191114045435N1**
Registration date: **2021-02-17, 1399/11/29**
Registration timing: **registered_while_recruiting**

Last update: **2021-02-17, 1399/11/29**
Update count: **0**

Registration date
2021-02-17, 1399/11/29

Registrant information

Name
Sara Shayegh

Name of organization / entity

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Iran (Islamic Republic of)

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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2020-08-22, 1399/06/01

Expected recruitment end date
2021-03-20, 1399/12/30

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Comparative study of Quadratus lumborum and Fascin illiaca nerve blocks on intraoperative narcotic use and postoperative analgesia criteria in acetabulum fracture surgeries by Stoppa method

Public title
Comparison of Quadratus and Fascin illiaca nerve blocks in acetabulum fracture surgery

Purpose
Other

Inclusion/Exclusion criteria
Inclusion criteria:
Age 20 to 75 years ASA Class I and II Acetabular fractures Elective surgery by Stoppa method Lack of sensitivity to topical anesthetic drugs No psychiatric diseases No drug or psychedelic addiction No fractures associated with trauma to other areas of the body Patients weighing less than 85 kg
Exclusion criteria:
History of acetabular fracture surgery

Age
From **20 years** old to **75 years** old

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **40**

Randomization (investigator's opinion)
N/A

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
Ethics Committee of Shahid Beheshti University of Medical Sciences
Street address
Yemen Street, Shahid Chamran Highway, Tehran
City
Tehran
Province
Tehran
Postal code
1985717443

Approval date
2020-09-01, 1399/06/11

Ethics committee reference number
IR.SBMU.MSP.REC.1399.266

Health conditions studied

1

Description of health condition studied
Acetabular fracture surgeries

ICD-10 code
S32.409

ICD-10 code description
Unspecified fracture of unspecified acetabulum

Primary outcomes

1

Description
morphine intake

Timepoint
6, 12 and 24 hours after the operation

Method of measurement
Patient file information

2

Description
Postoperative analgesia

Timepoint
6, 12 and 24 hours after the operation

Method of measurement
Patient file information

Secondary outcomes

1

Description
Fentanyl used during surgery

Timepoint
During the surgery

Method of measurement
observation

2

Description
The amount of morphine consumed

Timepoint
24 hours after surgery

Method of measurement
observation

3

Description
Blood pressure
Timepoint
during surgery
Method of measurement
Blood pressure monitor

4

Description
heart beat
Timepoint
during surgery
Method of measurement
heart beat monitoring

Intervention groups

1

Description
first Intervention group: Fascialiaka Block Group (FIB): In the supine position, after sterilizing the operation and performing cutaneous anesthesia, 2 cc of 1% lidocaine is injected at the site of the block. To perform nerve block, a high-frequency linear probe (10-25 MHz) of the ultrasound device (S-Nerre Sonosite) is used, which is placed horizontally in the inguinal region and in-plane with a needle (22 G, 80 mm). stimuplex ultra 360 °) B Braun is injected at a rate of 0.3 ml / kg and a maximum of 30 ml of 0.5% rupivacaine (manufactured by Molteni) with direct vision between the iliac fascia and the iliopsoas muscle.
Category
Treatment - Surgery

2

Description
Second Intervention group: QL group: In the supine position, a cloth roll is placed in the lumbar spine to lift the hip into the block entry area. After sterilizing the solution and performing skin anesthesia with a 2 cc lidocaine syringe needle, a 1% high-frequency linear probe (10-25 MHz) is inserted between the Costa Margin iliac crest at the anterior axillary line. The goal is to find the three abdominal anterolateral muscles (external oblique, internal oblique, and abdominis transverse). By moving the probe towards the posterolateral and with the disappearance of the abdominis transversal muscle and its aponeurosis being identified in the axillary posterior line, the quadratus rubrum muscle can be found, which is characterized as a hypovaco area of hypercoa aponeurosis. In this study, Curanasus lumburum 1 (QL1) or lateral Quartus lumbumum block is used, which with the help of needle (22 G, 80 mm, stimuplex ultra 360 °) B Braun rupivacaine 0.5% at a rate of 0.3 ml / g and A maximum of 30 ml is performed at the lateral termination site of the abdominis transverse muscle with precise hyperdissection.
Category
Treatment - Surgery

Recruitment centers

1

Recruitment center
Name of recruitment center
Imam Hossein Hospital
Full name of responsible person
Sara Shayegh
Street address
The beginning of Shahid Madani Street, Imam Hossein Square
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Shahid Beheshti University of Medical Sciences
Full name of responsible person
Afshin zarghi
Street address
Yemen Street, Shahid Chamran Highway
City
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1983969411
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+98 21 2243 9331
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zarghi@sbmu.ac.ir
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Shahid Beheshti 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
Shahid Beheshti University of Medical Sciences
Full name of responsible person
Sara Shayegh
Position
Resident
Latest degree
Medical doctor
Other areas of specialty/work
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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
No - There is not a plan to make this available
Justification/reason for indecision/not sharing IPD
There is no more information
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
Undecided - It is not yet known if there will be a plan to make this available