

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jul 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 Fasciialiaca 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% ropivacaine is injected with direct vision between the iliac fascia and the iliopsoas muscle. Patients in the QL group: Curanasus lumborum 1 (QL1) or lateral Quartus lumborum block is used with the help of Needle 22 Braun ropivacaine 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

Country

Iran (Islamic Republic of)

Phone

+98 21 2290 8383

Email address

shayegh@sbmu.ac.ir

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: Fascialia 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 lumbum 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

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Tehran

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1983969411

Phone

+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

Email

Shayegh@sbmu.ac.ir

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

Anesthesiology

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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