

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jul 2026

Comparison of the effect of platelet-rich plasma (PRP) with physiotherapy on pain and muscle damage and Returning to Sport in athletes with groin adductor muscle injury.

Protocol summary

Study aim

Determining the effect of PRP or platelet rich plasma compared to physiotherapy on pain relief and the average time to return to sports in athletes with groin adductor muscle damage.

Design

The clinical trial has a control group, with parallel groups, the sampling and randomization method is in the form of random numbers, so according to the sample size of twenty, twenty pieces of paper are randomly divided into two groups A and B, and each individual which enters the study, faces from the envelope of random numbers of group A or B. Randomized, phase 2 on 100 patients. The rand function of Excel software was used for randomization.

Settings and conduct

The place of the study is the sports medicine clinic of Imam Khomeini Hospital, which was conducted in 1400. The clinical trial includes athletes with adductor muscle tears. The duration of follow-up is 3 months.

Participants/Inclusion and exclusion criteria

Inclusion criteria 1. Patient consent to enter the study. 2. Second and third degree acute injury of the adductor muscle (based on ultrasound evidence) 3. No injury in other muscles around the pelvis (examination, history, ultrasound) Exit criteria 1. Failure to do corrective exercises 2. Absence of more than three physiotherapy sessions (17)

Intervention groups

The group that receives PRP injection and undergoes rehabilitation after the injection

Main outcome variables

pain relief

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20221218056850N1**

Registration date: **2023-04-18, 1402/01/29**

Registration timing: **registered_while_recruiting**

Last update: **2023-04-18, 1402/01/29**

Update count: **0**

Registration date

2023-04-18, 1402/01/29

Registrant information

Name

romisa majdi

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 11 3336 1700

Email address

romisa.majdi2019@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-04-09, 1402/01/20

Expected recruitment end date

2023-05-19, 1402/02/29

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of the effect of platelet-rich plasma (PRP)

with physiotherapy on pain and muscle damage and Returning to Sport in athletes with groin adductor muscle injury.

Public title

Comparison of the effect of platelet-rich plasma (PRP) with physiotherapy on pain and muscle damage and Returning to Sport in athletes with groin adductor muscle injury.

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Patient consent to enter the study Second and third degree acute injury of the adductor muscle (based on ultrasound evidence) No injury in other muscles around the pelvis (examination, history, ultrasound)

Exclusion criteria:

Failure to perform corrective exercises Absence of more than three physiotherapy sessions Desire not to continue studying

Age

No age limit

Gender

Both

Phase

3

Groups that have been masked

No information

Sample size

Target sample size: 20

Randomization (investigator's opinion)

Randomized

Randomization description

The sampling and randomization method is in the form of random numbers, so according to the sample size of twenty, twenty pieces of paper are randomly divided into two groups A and B, and each person who enters the study is drawn from the envelope of random numbers of group A. or it leads to b.

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 Mazandaran University of Medical Sciences

Street address

No. 1, University of Medical SciencesImam Khomeini Square, Joibar Street, Building

City

Sari

Province

Mazandaran

Postal code

4815733971

Approval date

2023-03-14, 1401/12/23

Ethics committee reference number

IR.MAZUMS.REC.1401.554

Health conditions studied

1

Description of health condition studied

groin pain

ICD-10 code

G89.11

ICD-10 code description

Acute pain due to trauma

Primary outcomes

1

Description

Average time to return to activity

Timepoint

One week after the injection and then every week up to six weeks in person, after six weeks up to two weeks by phone, after three months, they undergo a final examination again in person through a physical examination and the pain level of the patients using a VAS from zero to zero. The score is determined

Method of measurement

Visual Analogue Scale

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: They only receive PRP injection and undergo rehabilitation after the injectionThey will only receive one PRP injection with a volume of 3 cc with a 5 cc needle in the place of muscle rupture under ultrasound guidance, and after the injection they will undergo rehabilitation.

Category

Treatment - Drugs

2

Description

Control group: The group that underwent only 14

sessions of physiotherapy with the same modalities including TENS for 20 minutes, and IF for ten minutes in trigger point mode and ten minutes in pain mode and four sessions of Dry needling on all adductor muscles for 4 sessions and ten minutes of RF machine and exercise

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Imam Khomeini Hospital

Full name of responsible person

Rumisa Majdi

Street address

Amir Mazandarani Street, Imam Khomeini Hospital

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Web page address

<https://www.mazums.ac.ir>

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Mazandaran University of Medical Sciences

Full name of responsible person

Majid Saedi

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Moalem Ave

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m.saedi@mazums.ac.ir

Web page address

<https://www.mazums.ac.ir>

Grant name

Grant code / Reference number

Is the source of funding the same sponsor

organization/entity?

Yes

Title of funding source

Mazandaran 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

Mazandaran University of Medical Sciences

Full name of responsible person

Rumisa Majdi

Position

Sports medicine resident

Latest degree

Medical doctor

Other areas of specialty/work

Sport Medicine

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Person responsible for updating data

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Rumisa Majdi
Position
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Latest degree
Medical doctor
Other areas of specialty/work
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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Undecided - It is not yet known if there will be a plan to make this available
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