

Clinical Trial Protocol

Iranian Registry of Clinical Trials

18 Sep 2026

Comparison of Platelet Rich Plasma and Hyaluronic acid intraarticular injection on clinical outcome and Quality of life of patients with knee osteoarthritis

Protocol summary

Summary

The goal of this study is comparison of effect of intraarticular injection of platelet rich plasma and hyaluronic acid in function and quality of life in patients with knee osteoarthritis. Osteoarthritis is a prevalent condition that generates a high expense. patients with pain or joint swelling and radiologic findings of joint destruction since 3 months ago based on knee osteoarthritis criteria of The ACR will recruited. exclusion criteria are patients under treatment of anticoagulant or anti platelet drugs ,NSAIDs and corticosteroid usage and etc. 160 patients with knee OA will randomized in 2 groups and received PRP or HA injection. Two injection of PRP will be recieved with 4 weeks interval and HA will injected 3 time with 1 week interval.exercise will be prescribed for 2 groups. pain, function and quality of life will measured through SF36 and WOMAC questionnaires before intervention and after 12 months.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2014012113442N5**
Registration date: **2014-02-03, 1392/11/14**
Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2014-02-03, 1392/11/14

Registrant information

Name

Seyed Ahmad Raeissadat

Name of organization / entity

Modares Hospital

Country

Iran (Islamic Republic of)

Phone

+98 21 2273 1112

Email address

a_raeissadat@sbmu.ac.ir

Recruitment status

Recruitment complete

Funding source

Physical Medicine and Rehabilitation Department of Shahid Beheshti University of Medical Sciences

Expected recruitment start date

2012-10-31, 1391/08/10

Expected recruitment end date

2012-12-30, 1391/10/10

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of Platelet Rich Plasma and Hyaluronic acid intraarticular injection on clinical outcome and Quality of life of patients with knee osteoarthritis

Public title

cCmparison of Platelet Rich Plasma and Hyaluronic acid in patients with knee osteoarthritis

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: arthralgia since the past 3 months; radiologic evidence of articular damage (grade 1-4 of Kellgren-Lawrence scale) based on knee OA criteria of ACR. Exclusion criteria: systemic diseases such as diabetes mellitus and collagen vascular disorders; history

or presence of cancer or malignant disorders; any infection and active wound of the knee; presence of immunosuppressive, autoimmune and platelet disorders; treatment with anticoagulant and anti-platelet medications 10 days before injection; use of NSAIDs 2 days before injection; history of knee articular injections of corticosteroids 3 weeks or use of systemic corticosteroids 2 weeks before PRP injections; hemoglobin measures of less than 12 g/dl and platelet counts of less than 150,000 per micro liter; recent history of severe trauma to the knee; age less than 45 or over 75 year; history of vasovagal shock; pregnancy; breastfeeding; genu valgum/varum greater than 20 degrees.

Age

From **45 years** old to **75 years** old

Gender

Both

Phase

3

Groups that have been masked

No information

Sample size

Target sample size: **160**

Randomization (investigator's opinion)

Randomized

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**

Ethic committee of Shahid beheshti University of
Medical sciences

Street address

Shahid beheshti University of Medical
sciences,Velenjak

City

Tehran

Postal code**Approval date**

2012-10-28, 1391/08/07

Ethics committee reference number

124

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

knee osteoarthritis

ICD-10 code

M17

ICD-10 code description

Gonarthrosis [arthrosis of knee]

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

quality of life

Timepoint

before intervention & 1 year after intervention

Method of measurement

SF-36 questioner

2**Description**

function

Timepoint

before intervention & 1 year after intervention

Method of measurement

WOMAC questioner

3**Description**

knee pain

Timepoint

before intervention & 1 year after intervention

Method of measurement

WOMAC questioner

4**Description**

joint stiffness

Timepoint

before intervention & 1 year after intervention

Method of measurement

WOMAC questioner

Secondary outcomes

empty

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

Intervention group 1: platelet rich plasma, knee
intraarticular injection, 4 to 6 milliliter, 2 times, 4 weeks
interval

Category

Treatment - Drugs

2

Description

Intervention group 2: Hyaluronic acid, knee intraarticular injection, 4 milliliter, 3 times, 1 week interval

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Shahid Modarres Hospital

Full name of responsible person

Elham Ghorbani

Street address

Shahid Modarres Hospital, Kaj square, Saadat Abad street

City

Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Physical Medicine and Rehabilitation Department of Shahid Beheshti University of Medical Sciences

Full name of responsible person

Vice chancellor for research, Seyed Ahmad Raeissadat

Street address

Physical Medicine and Rehabilitation Departement, Shahid Modarres Hospital, Kaj square, Saadat abad

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Grant name

Grant code / Reference number

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

Yes

Title of funding source

Physical Medicine and Rehabilitation Department of Shahid Beheshti University of Medical Sciences

Proportion provided by this source

100

Public or private sector

empty

Domestic or foreign origin

empty

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

empty

Person responsible for general inquiries

Contact

Name of organization / entity

Shahid modarres hospital

Full name of responsible person

Elham Ghorbani

Position

Physical Medicine and Rehabilitation resident

Other areas of specialty/work

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Seyed Ahmad Raeissadat

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Web page address

Person responsible for updating data

Contact

Sharing plan

Deidentified Individual Participant Data Set (IPD)

empty

Study Protocol

empty

Statistical Analysis Plan

empty

Informed Consent Form

empty

Clinical Study Report

empty

Analytic Code

empty

