Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

The effect of platelet-rich plasma on endometrial thickness and pregnancy rate in repeated implantation failure patients (RIF) , A clinical trial study

Protocol summary

Study aim
The aim of this study was to investigate the effects of platelet-rich plasma (PRP) on endometrial thickness and quality, and also on pregnancy rate.

Design
not blinded, sham controlled clinical trial study with per-test and post-test

Settings and conduct
Sixty patients referred to Afzalipour Hospital, who had a history of implant failure, performed the clinical trial study. The PRP, taken from the patient's blood, was injected into the uterine cavity through a Tomcat catheter after two stages of centrifugation.

Participants/Inclusion and exclusion criteria
All RIF patients aged 20-45 years having no history of immunological, hematological or hormonal disorders, congenital or acquired uterine abnormalities, and chromosomal and genetic abnormalities were included in this study.

Intervention groups
Sixty RIF patients completed this clinical trial study. PRP extracted by the patient's blood and after two centrifuges step, infused into the uterine cavity through a Tomcat catheter.

Main outcome variables
Increased endometrial thickness, Successful implantation

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20200521047532N1**
Registration date: **2020-05-28, 1399/03/08**
Registration timing: **retrospective**

Last update: **2020-05-28, 1399/03/08**
Update count: **0**

Registration date
2020-05-28, 1399/03/08

Registrant information

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Fateme Amiri
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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2017-05-01, 1396/02/11

Expected recruitment end date
2018-01-01, 1396/10/11

Actual recruitment start date
2017-05-01, 1396/02/11

Actual recruitment end date
2018-01-01, 1396/10/11

Trial completion date
2018-03-01, 1396/12/10

Scientific title
The effect of platelet-rich plasma on endometrial thickness and pregnancy rate in repeated implantation failure patients (RIF) , A clinical trial study

Public title
Investigating the effect of PRP injection on increasing endometrial thickness

Purpose
Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Repeated Implantation Failure patients (RIF)

Exclusion criteria:

history of immunological disorders hematological disorders hormonal disorders congenital or acquired uterine abnormalities chromosomal and genetic abnormalities

Age

From **20 years** old to **45 years** old

Gender

Female

Phase

2-3

Groups that have been masked

No information

Sample size

Target sample size: **72**

Actual sample size reached: **60**

Randomization (investigator's opinion)

N/A

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Single

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

The Ethic Committee of Kerman University of Medical Sciences

Street address

Tahmaseb-abad cross- Jahad Street, Vice Resrach Building of kerman University of Medical Sciences,

City

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Province

Kerman

Postal code

7616913555

Approval date

2017-05-05, 1396/02/15

Ethics committee reference number

IR.KMU.REC1396.2007

Health conditions studied

1

Description of health condition studied

Infertility

ICD-10 code

N97

ICD-10 code description

Female infertility

Primary outcomes

1

Description

Increased Endometrial Thickness

Timepoint

Before and after PRP infusion, and in embryo transfer day

Method of measurement

Ultrasound

2

Description

successful embryo implantation

Timepoint

After transferring the fetus into the uterus

Method of measurement

pregnancy test

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: . PRP extracted by the patient's blood and after two centrifuges step, infused into the uterine cavity through a Tomcat catheter.

Category

Treatment - Drugs

2

Description

Intervention group: Endometrial thickness changes were measured in three stages before and after PRP infusing and in embryo transfer day by ultrasound.

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Afzalipour hospital

Full name of responsible person

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Sponsors / Funding sources

1

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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
Kerman 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
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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