Clinical Trial Protocol
Iranian Registry of Clinical Trials

07 Nov 2026

Evaluation of the effect of PRP on the outcome of IVF cycle in poorly responding patients

Protocol summary

Study aim
Determining the effect of Plasma richplatelet on IVF cycle outcome in poor responder patients

Design
This study is a before-after study that will be conducted in Shahid Beheshti Hospital, Kashan. This study will be conducted on 15 poor responder patients of Poseidon group 3 and 1

Settings and conduct
It includes people who refer to the infertility center of Shahid Beheshti Hospital in Kashan in 2022 and 15 people will be selected based on the entry and exit criteria.Before entering the IVF cycle, patients perform FSH and AMH hormone tests. If a follicle with a size of 12 to 14 micrometers is observed, the patient is prescribed Sterotide. When 2 or more than 2 follicles with a size of 17 or more than 17 mm are seen in the ultrasound, 36 hours after the final stimulation of the follicle, ovarian puncture is performed, and after the puncture, 5.2 cc of PRP is injected into each The ovary is injected.

Participants/Inclusion and exclusion criteria
The criteria for entering the study are age less than 35 years, BMI less than 30 and AMH<1.2 ng/ml AFC<5 or under 35 years and a history of poor response during IVF cycle with AMH>1.2 ng/ml AFC>5 Exclusion conditions are hematological disorders, immunological disorders,

Intervention groups
Fertility in women who belong to Poseidon 1-3 which is measuring ovarian stimulating hormone and anti-Müllerian hormoneendometrial thickness, embryo quality oocyte number and oocyte size before and after administration of PRP.

Main outcome variables
Investigating the effect of PRP on the outcome of the IVF cycle on the number of follicles larger than 17 mm on the number of antral follicles and the number of M2 oocytes and the percentage of fertilization and the number of embryos Weber embryo quality Weber endometrial thickness

General information

Reason for update

Acronym
PRP in infertility

IRCT registration information
IRCT registration number: **IRCT20220809055651N1**
Registration date: **2022-10-30, 1401/08/08**
Registration timing: **registered_while_recruiting**

Last update: **2022-10-30, 1401/08/08**
Update count: **0**

Registration date
2022-10-30, 1401/08/08

Registrant information

Name
Zahra Usefi

Name of organization / entity

Country
Iran (Islamic Republic of)

Phone
+98 31 3650 8827

Email address
usefi-z@kaums.ac.ir

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2022-10-23, 1401/08/01

Expected recruitment end date
2023-03-20, 1401/12/29

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Evaluation of the effect of PRP on the outcome of IVF cycle in poorly responding patients

Public title
PRP in infertility
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria:
This study will be conducted on 15 poor responder patients of group 3 and 1 poseidon. Inclusion criteria: age less than 35 years, BMI less than 30 and AMH<1.2 ng/ml AFC<5 (group 3 Poseidon) or women under 35 years and a history of poor response during IVF cycle with AMH >1.2 ng/ml AFC >5 (Group 1 of Poseidon).
Exclusion criteria:
Hematological disorders (leukemia, thrombocytopenia), immunological disorders (antiphospholipid syndrome, thrombophilia), hormonal disorders (diabetes, thyroid, hyperprolactinemia), chromosomal and genetic abnormalities (hereditary or congenital) and kidney failure.
Age
To **35 years** old
Gender
Female

Phase
2
Groups that have been masked
No information
Sample size
Target sample size: **15**
Randomization (investigator's opinion)
N/A
Randomization description
Blinding (investigator's opinion)
Not blinded
Blinding description
Placebo
Not used
Assignment
Single
Other design features
Hematological disorders (leukemia, thrombocytopenia), immunological disorders (antiphospholipid syndrome, thrombophilia), hormonal disorders (diabetes, thyroid, hyperprolactinemia), chromosomal and genetic abnormalities (hereditary or congenital) and kidney failure.

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics committee of kashan University of Medical Sciences
Street address
esfahan -kashan -daneshghah olome pezeshki kashan-saite maskonie daneshghah
City
kashan
Province
Isfehan
Postal code
8715985131
Approval date
2022-07-16, 1401/04/25
Ethics committee reference number
IR.KAUMS.MEDNT.REC.1401.056

Health conditions studied

1

Description of health condition studied
Evaluation of the effect of PRP on the outcome of IVF cycle in poorly responding patients
ICD-10 code
ICD-10 code description

Primary outcomes

1

Description
Endometrial thickness
Timepoint
Before entering the cycle on the fifth day of the eighth and three months later
Method of measurement
Ultrasound

2

Description
Oocyte count
Timepoint
Before entering the cycle on the fifth day of the eighth and three months later
Method of measurement
Ultrasound (sonography)

Secondary outcomes

1

Description
ANTI MOULLERIAN HORMON
Timepoint
Before entering the cycle on the fifth day of the eighth and three months later
Method of measurement
Measurement by blood test analysis after eight hours of fasting and without intimacy and stress the night before

2

Description
Follicle-stimulating Hormone
Timepoint
Before entering the cycle on the fifth day of the eighth and three months later
Method of measurement
Measurement by blood test analysis after eight hours of fasting and without intimacy and stress the night before

Intervention groups

1

Description
The present study is a before and after clinical trial study that will be conducted in Shahid Beheshti Hospital, Kashan. This study will be conducted on 15 poor responder patients of group 3 and 1 poseidon. The IVF cycle begins with the administration of HMG at a dose of 300 IU/d, and on the fifth day, ultrasound stimulation is performed again. If a follicle with a size of 12 to 14 micrometers is observed, the patient is prescribed Sterotide (MG0.25). When 2 or more than 2 follicles with a size of 17 or more than 17 mm are seen in ultrasound,The final follicle stimulation is done by prescribing HCG 10000 + ptyl 0.2mg Decape for the patient. HMG Vestrotide brand is one of the drugs available in the market and PRP is Avigen brand. 36 hours after the final follicle stimulation, the ovary is punctured and after the puncture at the rate of 2.5 CC PRP is injected into each ovary. 3 months after PRP administration, FSH and AMH levels are measured in the same people, and IVF cycles are performed again with the same method as before, and the number of follicles with a size of 17 micrometers or more, the number of M2 oocytes, the percentage of fertilization, the number of embryos and the quality The embryo and the thickness of the endometrium are examined. Finally, all these criteria that were mentioned are compared with the time before PRP administration.
Category
Treatment - Drugs

Recruitment centers

1

Recruitment center
Name of recruitment center
KASHAN SHAHID BEHESHTI HOSPITAL
Full name of responsible person
ZAHRA USEFI
Street address
ESFAHAN-kashan -bolvar ghotbe ravandi-bimarestan shahid beheshti kashan
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Isfehan
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Phone
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Email
usefi-z@kaums.ac.ir
Web page address
http://beheshti.kaums.ac.ir/

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Kashan University of Medical Sciences
Full name of responsible person
dr tayebe hashemi
Street address
Kashan Qutub Rawandi Blvd. Kashan University of Medical Sciences residential site of the university
City
kashan
Province
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Postal code
8715985131
Phone
+98 922 875 2168
Email
usefi-a@kaums.ac.ir
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Kashan 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
Kashan University of Medical Sciences
Full name of responsible person
zahra usefi
Position
Obstetrics and Gynecology Surgery Resident
Latest degree
Medical doctor
Other areas of specialty/work
Gynecology and Obstetrics

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Person responsible for scientific inquiries

Contact
Name of organization / entity
Kashan University of Medical Sciences
Full name of responsible person
dr tayebe hashemi
Position
Assistant Professor
Latest degree
Subspecialist
Other areas of specialty/work
Gynecology and Obstetrics
Street address
Kashan Qutub Rawandi Blvd. Kashan University of Medical Sciences residential site of the university
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Person responsible for updating data

Contact
Name of organization / entity
Kashan University of Medical Sciences
Full name of responsible person
zahra usefi
Position
resident of obstraction and genycology
Latest degree
Medical doctor
Other areas of specialty/work
Gynecology and Obstetrics
Street address
Kashan Qutub Rawandi Blvd. Kashan University of Medical Sciences residential site of the university
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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