Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

Estrogen priming effect on antagonist cycles in poor responded patient

Protocol summary

Summary

The aim of this study is estrogen priming effect on antagonist cycles in poor responder patients. The study included 106 women 19 to 42 years old with low ovarian reserve who were referred to Al-Zahra infertility clinic. Exclusion criteria are those who do not respond or have a cycle of follicle has been canceled. In this study, the number of follicles developed the number and quality of oocytes and the resulting embryos, endometrial thickness, chemical and clinical pregnancy rate and the number of embryos obtained will be examined. Patients were randomly divided into two groups; 53 patients in control and 53 in the control group. In the intervention group in the 21day of cycle before IVF 2 mg Estradiol ValerateWill start daily and will continue until the second day of cycles. From the second day of cycles with HCG and FSH ovarian stimulation cycles carried out and then on the eighth day (follicle maturation to 12 to 14mm) GNRH antagonist will start and will continue to inject HCG. After seeing at least 2 follicles with dimensions 18mm and above, oocytes from the ovary by transvaginal ultrasound will be taken. After culturing the embryo and grading, the embryo is transferred into the uterus. The control group also entered the treatment cycle with antagonist and gonadotropin with the same conditions only without estrogen priming effect.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201602075942N3**
Registration date: **2016-04-26, 1395/02/07**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2016-04-26, 1395/02/07

Registrant information

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Recruitment status

Recruitment complete

Funding source

Vice chancellor for Research, Tabriz University of Medical Sciences

Expected recruitment start date

2016-04-16, 1395/01/28

Expected recruitment end date

2017-06-20, 1396/03/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Estrogen priming effect on antagonist cycles in poor responded patient

Public title

Estrogen priming effect on antagonist cycles in poor responded patient

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Women 19 to 42 years old with low ovarian reserve; Women who have not responded to treatment with short antagonist protocol and gonadotropin or the number of oocytes has been equal

to or less than 3. Exclusion criteria: who do not respond to treatment or have a cycle of follicle has been canceled; People who have certain diseases like hypothyroidism or hyper prolactin; If patients have complications such as embolism and contraindications to estrogen

Age
From **19 years** old to **42 years** old

Gender
Female

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **106**

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features
Patients divided into two groups of 53 people with table of random numbers

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Ethics Committee of Tabriz University of Medical Sciences

Street address
Ethics Committee Of Tabriz University Of Medical Sciences; Third Floor, Central Building of Number2, Golgasht Street

City
Tabriz

Postal code

Approval date
2016-02-04, 1394/11/15

Ethics committee reference number
TBZMED.REC.1394.1003

Health conditions studied

1

Description of health condition studied
Female infertility

ICD-10 code
N97.0

ICD-10 code description
Female infertility associated with anovulation

Primary outcomes

1

Description
The number of mature follicles

Timepoint
14 day of menstrual cycle.

Method of measurement
Ultrasound

2

Description
Oocytes and embryos obtained count

Timepoint
14 day of menstrual cycle.

Method of measurement
Ultrasound

Secondary outcomes

1

Description
Chemical and clinical pregnancy rate

Timepoint
After the delay period

Method of measurement
Tests and ultrasound

2

Description
The resulting embryo count

Timepoint
A month after a positive pregnancy test

Method of measurement
Ultrasound

Intervention groups

1

Description
Intervention group: From 21 days of cycle before the IVF , will be start oral estradiol valerate with 2 mg daily and will continue to the next cycle until the second day of the next cycle. ovarian stimulation takes place with HMG and of second day. And then on the eighth day that follicle size was the size of 14 to 12 mm . Gonadotropin-releasing hormone will start.

Category
Treatment - Drugs

2

Description

Control group: The control group also entered the antagonist and the gonadotropin treatment cycle , without treatment with estradiol.

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Alzahra Hospital

Full name of responsible person

Dr.Aliyeh Ghasemzadeh

Street address

Alzahra Hospital, South Artesh Street

City

Tabriz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice Chancellor for Research and Technology
University of medical sciences

Full name of responsible person

Dr.Alireza Rashidi

Street address

Tabriz University Of Medical Sciences, Golgasht Street

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Tabriz

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Vice Chancellor for Research and Technology 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

Tabriz University of medical Sciences

Full name of responsible person

Dr.Aliyeh Ghasemzadeh

Position

Associate Professor of Obstetrics Gynecology

Other areas of specialty/work

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Full name of responsible person

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Position

Associate Professor of Obstetrics Gynecology

Other areas of specialty/work

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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
Data Dictionary
empty