

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Comparison of fetal transfer results under abdominal ultrasound with fetal transfer based on previous measurement of uterine length with vaginal ultrasound in assisted reproductive cycles

Protocol summary

Study aim

Comparison of two embryo transfer methods in increasing implantation and pregnancy in assisted reproductive cycles

Design

A clinical trial with two parallel groups and a sample size of 260 people. Randomization will be done using random allocation1 software. Block randomization method will be done. Blinding will not be done.

Settings and conduct

It is done at Yazd Infertility Research Center.

Participants/Inclusion and exclusion criteria

Women 18 to 40 years old are candidates for frozen embryo transfer are included in the study , and cases of severe male infertility, including azoospermia and sperm from TESE or PESA, and a body mass index greater than 30 are excluded.

Intervention groups

The first intervention group receives 6 mg of oral estradiol daily from the second day of the cycle and on day 13 of the cycle, transvaginal ultrasound is performed. Embryo transfer takes place at the stage of 8-cell cleavage. The transfer is performed under the guidance of abdominal ultrasound. The second intervention group receives 6 mg of oral estradiol from the second day of the cycle, and on the 13th cycle, transvaginal ultrasound is performed. Embryo transfer takes place in the 8-cell cleavage stage. Ultrasound measurement of uterine length is performed before transfer with vaginal ultrasound and the length of the catheter is adjusted based on the uteroservical length measured in the ultrasound.

Main outcome variables

clinical pregnancy

General information

Reason for update

Update methodology changes

Acronym

IRCT registration information

IRCT registration number: **IRCT20110509006420N24**

Registration date: **2021-12-08, 1400/09/17**

Registration timing: **prospective**

Last update: **2022-12-08, 1401/09/17**

Update count: **2**

Registration date

2021-12-08, 1400/09/17

Registrant information

Name

Maryam Eftekhar

Name of organization / entity

Yazd Research and Clinical Center for Infertility

Country

Iran (Islamic Republic of)

Phone

+98 35182470856

Email address

eftekhar@ssu.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-12-06, 1400/09/15

Expected recruitment end date

2022-06-05, 1401/03/15

Actual recruitment start date

2021-12-21, 1400/09/30

Actual recruitment end date

2022-07-09, 1401/04/18

Trial completion date

2022-09-22, 1401/06/31

Scientific title

Comparison of fetal transfer results under abdominal ultrasound with fetal transfer based on previous measurement of uterine length with vaginal ultrasound in assisted reproductive cycles

Public title

fetal transfer under abdominal ultrasound compared with fetal transfer based on the previous measurement of uterine length

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

Infertile women who are candidates for frozen embryo transfer.

Exclusion criteria:

Severe male infertility includes cases of azoospermia and sperm from TESE or PESA Body mass index more than 30

Age

From **18 years** old to **40 years** old

Gender

Female

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **260**

Actual sample size reached: **260**

Randomization (investigator's opinion)

Randomized

Randomization description

Each participant is assigned a number from 1 to 264, and then 9 blocks of 32 are considered, and then each block is randomly selected. In each block, the type of treatment protocol of the participants is determined. Randomization using software The random allocation 1 software will be a block randomization method. The randomization of samples in each block is independent, which is specified by the software, and the researchers do not know about the randomized list.

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 Yazd Research and Clinical Center for infertility, Shahid Sadoughi University

Street address

Bouali Ave, Safaeiyeh

City

Yazd

Province

Yazd

Postal code

8916877391

Approval date

2021-02-21, 1399/12/03

Ethics committee reference number

IR.SSU.RSI.REC.1399.047

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

Infertility

ICD-10 code

N97

ICD-10 code description

Female infertility

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

Clinical pregnancy

Timepoint

3 weeks after positive beta-h Cg

Method of measurement

Observation of fetal heart activity by transvaginal ultrasonography

Secondary outcomes**1****Description**

Early Miscarriage rate

Timepoint

10 weeks after embryo transfer

Method of measurement

Absence of fetal heart activity in ultra sound sonography

2**Description**

Implantation rate

Timepoint

3 weeks after positive beta-h Cg

Method of measurement

Calculated by the number of gestational sacs observed on ultrasound on the number of embryos transferred

3

Description

Chemical pregnancy

Timepoint

15 days after embryo transfer

Method of measurement

Blood laboratory kit

Intervention groups

1

Description

Intervention group: intervention group receives 6 mg of oral estradiol from the second day of the cycle, and on the 13th cycle, transvaginal ultrasound is performed. Embryo transfer takes place in the 8-cell cleavage stage. Ultrasound measurement of uterine length is performed before transfer with vaginal ultrasound and the length of the catheter is adjusted based on the uterocervical length measured in the ultrasound.

Category

Treatment - Other

2

Description

Intervention group: receives 6 mg of oral estradiol daily from the second day of the cycle and on day 13 of the cycle, transvaginal ultrasound is performed. Embryo transfer takes place at the stage of cleavage. Transfer is performed under the guidance of abdominal ultrasound.

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Yazd Research and Clinical Center for Infertility

Full name of responsible person

Freshteh Bahrami

Street address

Safaeiyeh, Bouali Ave

City

Yazd

Province

Yazd

Postal code

8916977443

Phone

+98 35 3824 7085

Email

freshtebahrami1966@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Yazd University of Medical Sciences

Full name of responsible person

Hooshang Mehrparvar

Street address

Bahonar Ave

City

Yazd

Province

Yazd

Postal code

8916978477

Phone

+98 35 3726 3733

Email

ah.mehrparvar@gmail.com

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Yazd 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

Yazd University of Medical Sciences

Full name of responsible person

Maryam Eftekhari

Position

Professor

Latest degree

Specialist

Other areas of specialty/work

Gynecology and Obstetrics

Street address

Safaeiyeh, Bouali Ave

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Email

eftekharmaryam@yahoo.com

Person responsible for scientific inquiries

Contact

Name of organization / entity

Yazd University of Medical Sciences

Full name of responsible person

Maryam Eftekhar

Position

Professor

Latest degree

Specialist

Other areas of specialty/work

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Yes - There is a plan to make this available

Study Protocol

Yes - There is 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

Title and more details about the data/document

All participant data sets are to be shared

When the data will become available and for how long

2 months after the result publication

To whom data/document is available

A journal in which the results are published

Under which criteria data/document could be used

Submission of an official application via the agent that is legally in charge

From where data/document is obtainable

Yazd Reproductive Sciences Institute, Bouali Ave, Yazd, Iran

What processes are involved for a request to access data/document

Request from the Research Deputy, submitted to the Research Council of the Center if the request accepts its referral to the security and after completion of the relevant forms, the request is referred to the research experts and then get the data.

Comments

Person responsible for updating data

Contact

Name of organization / entity

Yazd University of Medical Sciences

Full name of responsible person

Maryam Eftekhar

Position

Professor

Latest degree

Specialist

Other areas of specialty/work

Gynecology and Obstetrics

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