Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 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
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Iran (Islamic Republic of)
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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
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8916977443
Phone
+98 35 3824 7085
Email
freshtehbahrami1966@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
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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 Eftekhar
Position
Professor
Latest degree
Specialist
Other areas of specialty/work
Gynecology and Obstetrics
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Safaeiyeh, Bouali Ave
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eftekharmaryam@yahoo.com

Person responsible for scientific inquiries

Contact

Name of organization / entity
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Full name of responsible person
Maryam Eftekhar

Position
Professor

Latest degree
Specialist

Other areas of specialty/work
Gynecology and Obstetrics

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Person responsible for updating data

Contact

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Full name of responsible person
Maryam Eftekhar

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Email
eftekharmaryam@yahoo.com

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