

Clinical Trial Protocol

Iranian Registry of Clinical Trials

21 Jun 2026

Comparing the effect of endometrial scratch with luteal phase versus follicular phase in FET women candidates outcome

Protocol summary

Study aim

Comparison of the efficacy of endometrial scraping in follicular and luteal phases in pregnancy rate of FET women referred to Fatemieh Hospital Infertility Center, Hamadan, Iran, during the years 2019-2020.

Design

In this single-blind study, patients (290 women) were randomly assigned into two groups: intervention group 1 and 2.

Settings and conduct

In this single-blind study, patients referred to Fatemieh Infertility Center in Hamadan were randomly divided into two groups. Patients in group 1 were scratched at the beginning of the follicular phase with the onset of estradiol with a pipette catheter. Patients in group 2 are scratched in the mid-luteal phase of the preceding cycle. Each group is given an NSAIDS compound half an hour before the procedure. Then the two groups will be compared regarding pregnancy success rate, duration of drug administration, estradiol dose.

Participants/Inclusion and exclusion criteria

Inclusion criteria: women candidates for the freeze-frozen transfer cycle are 43 years old and younger and have at least two embryos with grade A and normal cavities. Exclusion criteria: absence of a fetus with a uterus above 7 mm

Intervention groups

Intervention group 1 patient who was scratched at the beginning of follicular phase with estradiol initiation with pipette catheter. Intervention group 2 patient phase means of the previous lottery cycle are scratched.

Main outcome variables

Success of pregnancy

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20191031045292N1**

Registration date: **2019-12-16, 1398/09/25**

Registration timing: **registered_while_recruiting**

Last update: **2019-12-16, 1398/09/25**

Update count: **0**

Registration date

2019-12-16, 1398/09/25

Registrant information

Name

Shamim Pilehvar

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 81 3827 7459

Email address

sh.pilehvar@umsha.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2019-11-22, 1398/09/01

Expected recruitment end date

2020-11-21, 1399/09/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparing the effect of endometrial scratch with luteal phase versus follicular phase in FET women candidates outcome

Public title

Pregnancy by endometrial scratch

IR.UMSHA.REC.1398.615

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Women candidates for frozen embryo transfer cycles with at least two Grade A Women candidates for frozen embryo transfer cycles with Two embryos with normal cavities From 21 years old to 35 years old

Exclusion criteria:

The embryo without uterus above 7 mm

Age

From **25 years** old to **43 years** old

Gender

Female

Phase

N/A

Groups that have been masked

- Participant

Sample size

Target sample size: **290**

Randomization (investigator's opinion)

Randomized

Randomization description

Patients will be divided into treatment groups A and B using block randomization.

Blinding (investigator's opinion)

Single blinded

Blinding description

Patients were randomly assigned to one of two groups.

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Hamadan university of Medical Sciences

Street address

Hamedan University of Medical Sciences, Opposite the Mardom Park

City

Hamadan

Province

Hamadan

Postal code

6516735537

Approval date

2019-10-26, 1398/08/04

Ethics committee reference number

Health conditions studied

1

Description of health condition studied

Infertility

ICD-10 code

N97

ICD-10 code description

Female infertility

Primary outcomes

1

Description

Success of pregnancy

Timepoint

14 days after IVF

Method of measurement

BHCG

Secondary outcomes

1

Description

Pregnancy

Timepoint

Eight weeks after intervention

Method of measurement

BHCG test, Observation of pregnancy sac and positive sonography

Intervention groups

1

Description

Intervention group 1: in the follicular phase, patients are scratched in four directions simultaneously with ultrasound and confirmation of estrogen initiation using a papillary catheter. Half an hour before the procedure, patients are given a combination of NSAIDS.

Category

Treatment - Surgery

2

Description

Intervention group 2: patients in the luteal phase are also scratched high on day 21-19 before estrogen is started. Half an hour before the procedure, patients are given a combination of NSAIDS.

Category

Treatment - Surgery

Recruitment centers

1

Recruitment center

Name of recruitment center

Fatemieh Hamadan

Full name of responsible person

Shamim Pilevari

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Pasdaran Avenue

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Hamedan University of Medical Sciences

Full name of responsible person

Saeed Bashirian

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Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

No

Title of funding source

Vice chancellor for research, Hamedan 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

Hamedan University of Medical Sciences

Full name of responsible person

Shamim Pilevari

Position

Assistant professor

Latest degree

Specialist

Other areas of specialty/work

Gynecology and Obstetrics

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Latest degree

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Latest degree

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Sharing plan**Deidentified Individual Participant Data Set (IPD)**

No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD

No more information

Study Protocol

No - There is not a plan to make this available

Statistical Analysis Plan

No - There is not a plan to make this available

Informed Consent Form

No - There is not a plan to make this available

Clinical Study Report

No - There is not a plan to make this available

Analytic Code

No - There is not a plan to make this available

Data Dictionary

No - There is not a plan to make this available