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 pipple catheter. Patients in group 2 are scratched in the mid-lethal 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 pipple 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

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

IR.UMSHA.REC.1398.615

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
Street address
Pasdaran Avenue
City
Hamadan
Province
Hamadan
Postal code
6517789971
Phone
+98 81 3827 7012
Email
sh.pilehvar@umsha.ac.ir

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Hamedan University of Medical Sciences
Full name of responsible person
Saeed Bashirian
Street address
Hamedan University of Medical Sciences, Opposite the Mardom Park
City
Hamadan
Province
Hamadan
Postal code
6516735537
Phone
+98 81 3827 7012
Email
Webda@umsha.ac.ir

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
Street address
Pasdaran Avenue
City
Hamadan
Province
Hamadan
Postal code
6517789971
Phone
+98 81 3827 7012
Email
sh.pilehvar@umsha.ac.ir

Person responsible for scientific 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
Street address
Pasdaran Avenue
City
Hamadan
Province
Hamadan
Postal code
6517789971
Phone
+98 81 3827 7012
Email
sh.pilehvar@umsha.ac.ir

Person responsible for updating data

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
Street address
Pasdaran Avenue
City
Hamadan
Province
Hamadan
Postal code
6517789971
Phone
+98 81 3827 7012
Email
sh.pilehvar@umsha.ac.ir

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