

Clinical Trial Protocol

Iranian Registry of Clinical Trials

29 Jun 2026

Comparative effect of propofol and dexmedetomidine on fertility rate in patients candidate for IVF

Protocol summary

Study aim

Determination and Comparison of the Effect of Propofol and Dexmedetomidine on Fertility Rate in IVF Candidates

Design

In this randomized clinical trial, 78 infertile patients undergoing IVF treatment will be available and will be examined. The code of ethics will be obtained from the Ethics Committee of Shahid Beheshti University before starting the study. Inclusion criteria are infertility and being a candidate for IVF treatment, and exclusion criteria include cases where patient data are incomplete or cannot be followed up. Subjects were randomly assigned to one of the two groups receiving propofol or dexmedetomidine at standard recording doses and fertility rates were compared between the two groups using chi-square and Fisher tests and the significance level was 0.05.

Settings and conduct

Patients with Infertility Candidate in Laboratory Referred to Taleghani Hospital in Tehran

Participants/Inclusion and exclusion criteria

Inclusion criteria are infertility and being a candidate for IVF treatment, and exclusion criteria include cases where patient data are incomplete or cannot be followed up.

Intervention groups

Infertility patients undergoing IVF treatment

Main outcome variables

This study addresses the question of whether the effect of propofol and doxmedetomidine on fertility rates in IVF candidates is different, in order to determine the best drug with appropriate outcomes in women undergoing IVF treatment.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20190121042444N2**

Registration date: **2020-05-13, 1399/02/24**

Registration timing: **registered_while_recruiting**

Last update: **2020-05-13, 1399/02/24**

Update count: **0**

Registration date

2020-05-13, 1399/02/24

Registrant information

Name

faranak behnaz

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 21 2274 1174

Email address

faranak.behnaz@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2020-03-20, 1399/01/01

Expected recruitment end date

2021-03-21, 1400/01/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparative effect of propofol and dexmedetomidine on fertility rate in patients candidate for IVF

Public title

Comparative effect of propofol and dexmedetomidine on fertility rate in patients candidate for IVF

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Infertility patients undergoing IVF treatment

Exclusion criteria:

Patients who need general anesthesia due to decreased oxygen saturation

Age

From **18 years** old to **48 years** old

Gender

Female

Phase

3

Groups that have been masked

- Participant
- Investigator

Sample size

Target sample size: **78**

Randomization (investigator's opinion)

Randomized

Randomization description

Random number table this method, based on the table of random numbers, first the number of samples is entered using a computer and each double-digit code is assigned. The researcher randomly selects a point in the Weston line. Work continues until the sample size is complete

Blinding (investigator's opinion)

Double blinded

Blinding description

The researcher, the researcher who prescribes the drug, is blind In this study, Drugs 1 and Drugs 2 are anesthetized by Nerses. Here Ners knows type 1 and 2 and is placed at the discretion of the researcher, who is an anesthesiologist and unaware of type 1 or 2, so the researcher is blind here and the participants in the study are blind because type 1 And they don't know 2

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

کمیته ملی اخلاق در پژوهش های زیست پزشکی

Street address

Quds Town between South Flamak Vazravshan Iran Street, Saya Central Headquarters Ministry of Health and Medical Education Tayyee 13

City

Tehran

Province

Tehran

Postal code

1467664961

Approval date

2020-03-15, 1398/12/25

Ethics committee reference number

IR.SBMU.MSP.REC.1398.995

Health conditions studied

1

Description of health condition studied

infertility

ICD-10 code

N97. 9

ICD-10 code description

Primary outcomes

1

Description

BMI

Timepoint

Before the intervention and one week after the intervention at the same time as the laboratory test for pregnancy

Method of measurement

Based on checklist and measurement

2

Description

Fertility

Timepoint

Before the intervention and One week after the intervention

Method of measurement

Positive / negative based on intravenous blood test for pregnancy test

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: In this study, they were randomly assigned to a group under the intervention of propofol with a dose of 10-20 micrograms based on weight per minute. Then the success of the pregnancy is checked by fertility blood test one week after .

Category

Treatment - Drugs

2

Description

Intervention group: Another group under the dose of dexmedetomidine with a dose of 0.4-0.2 microgram based on weight per minute. Then the success of the pregnancy is checked by fertility blood test one week after. The two intervention groups are then compared in terms of the success of the pregnancy by artificial insemination

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Taleghani Hospital - Tehran

Full name of responsible person

atiyeh tizghadam

Street address

Yemen Street/Velenjak

City

Tehran

Province

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1985711151

Phone

+98 21 2274 1174

Email

atiyeh.tizghadam@yahoo.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Shahid Beheshti University of Medical Sciences

Full name of responsible person

Nahid Asadi

Street address

Yaman/Velenjak

City

Tehran

Province

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Postal code

1985711151

Phone

+98 21 2243 2572

Email

nahidasadi25@yahoo.com

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

Yes

Title of funding source

Shahid Beheshti University of Medical Sciences

Proportion provided by this source

25

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

Shahid Beheshti University of Medical Sciences

Full name of responsible person

Faranak Behnaz

Position

Asistant professor

Latest degree

Specialist

Other areas of specialty/work

Anesthesiology

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1989934148

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Person responsible for scientific inquiries

Contact

Name of organization / entity

Shahid Beheshti University of Medical Sciences

Full name of responsible person

Faranak Behnaz

Position

Asistant professor

Latest degree

Specialist

Other areas of specialty/work

Anesthesiology

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Person responsible for updating data

Contact

Name of organization / entity

Shahid Beheshti University of Medical Sciences

Full name of responsible person

Atiyeh Tizghadam

Position

Rezident

Latest degree

Medical doctor

Other areas of specialty/work

Anesthesiology

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Undecided - It is not yet known if there will be a plan to make this available

Study Protocol

Undecided - It is not yet known if there will be 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