Clinical Trial Protocol
Iranian Registry of Clinical Trials

18 Sep 2026

Comparison of Remifentanil-Propofol vs. Alfentanil-Propofol on fertilization and pregnancy rates in assisted reproductive(IVF-ICSI) patients referred to the Fertility Center of Fatemeh Zahra

Protocol summary

Summary

This study compared the analgesic effect of remifentanil and alfentanil on the results and success rate of assisted reproductive technology (ART) including in vitro fertilization (IVF) or intracytoplasmic sperm injection (ICST) was performed.100 cases of women using assisted reproductive techniques for pregnancy, in the age group 18-35 years were enrolled. Patients were divided randomly into two groups.Induction of anesthesia was performed in both groups with propofol 2 mg/ kg. For the first group Alfentanil 20 micrograms /kg and for second group remifentanil 1micrograms/kg was administered. For maintain of anesthesia in both groups was used of infusion of propofol with a dose of 100 micrograms /kg/min. Blood pressure, heart rate and oxygen saturation were measured and recorded every 5 minutes. It also the number of aspirated oocytes, fertilization is done and the number of embryos that were transferred was recorded. The recovery time was measured after discontinuing of drug infusion, based on open eyes on command. The incidence of postoperative nausea and vomiting were also studied. Beta-HCG was evaluated 15-17 days after embryo transfer.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201104096148N1**
Registration date: **2012-06-12, 1391/03/23**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2012-06-12, 1391/03/23

Registrant information

Name

Hakimeh Alreza Amiri

Name of organization / entity

Babol University of Medical Sciences

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Recruitment status

Recruitment complete

Funding source

vice-chancellor Of Research Babol University Of Medical Sciences

Expected recruitment start date

2010-05-22, 1389/03/01

Expected recruitment end date

2011-06-10, 1390/03/20

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of Remifentanil-Propofol vs. Alfentanil-Propofol on fertilization and pregnancy rates in assisted reproductive(IVF-ICSI) patients referred to the Fertility Center of Fatemeh Zahra

Public title

Comparison of Remifentanil-Propofol vs Alfentanil-Propofol on fertilization and pregnancy rates in assisted reproductive

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Infertile Women who use assisted reproductive techniques for pregnancy Exclusion criteria: Women over 40 years, patients with psychological disorders and addiction.

Age

From **18 years** old to **35 years** old

Gender

Female

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **100**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Single blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Babol University Of Medical Sciences

Street address

Daneshgah Sq - Ganjafrooz St

City

Babol

Postal code

Approval date

2011-04-27, 1390/02/07

Ethics committee reference number

3546/1/30/ژ/پ

Health conditions studied

1

Description of health condition studied

In Vitro Fertilization

ICD-10 code

Z31.2

ICD-10 code description

In vitro fertilization

Primary outcomes

1

Description

Rate of pregnancy

Timepoint

15-17 days after Embryo transfer

Method of measurement

Pregnancy Test

Secondary outcomes

1

Description

Formation of fetus

Timepoint

3 days after the puncture of ovarian follicle

Method of measurement

The number of formation of fetus

2

Description

Post operative of nausea & Vomiting

Timepoint

After Anesthesia

Method of measurement

Question & observation

3

Description

Recovery time after anesthesia

Timepoint

Waking up after discontinuation of drug infusion

Method of measurement

Discontinuation of the infusion time to open eyes with a call

Intervention groups

1

Description

In the control group, induction of anesthesia with alfentanil 20 microgram/kg and 2 mg /kg propofol for oocyte aspiration of ovarian follicles are prescribed.

Category

Treatment - Drugs

2

Description

The first group, the induction of general anesthesia with 1 microgram/kg for remifentanil and propofol 2 mg/kg body weight for oocyte aspiration of ovarian follicles.

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center
Name of recruitment center
Infertility and Reproductive Health Research Center
Full name of responsible person
Dr Hakimeh Alereza
Street address
City
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Vice-chancellor Of Research Babol University Of Medical Sciences
Full name of responsible person
Dr Amrolah Mostafazadeh
Street address
Vice-chancellor Of Research, Daneshgah Square, Ganjafrooz Avenue
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Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Vice-chancellor Of Research Babol University Of Medical Sciences
Proportion provided by this source
100
Public or private sector
empty
Domestic or foreign origin
empty
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
empty

Person responsible for general inquiries

Contact
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Web page address

Sharing plan

Deidentified Individual Participant Data Set (IPD)
empty

Study Protocol
empty
Statistical Analysis Plan
empty
Informed Consent Form
empty
Clinical Study Report
empty
Analytic Code
empty
Data Dictionary
empty