

Clinical Trial Protocol

Iranian Registry of Clinical Trials

15 Jul 2026

The comparison of pregnancy rate of day 2 versus day 3 and blastocyst embryo transfer in ICSI (intra cytoplasmic sperm injection) method

Protocol summary

Summary

Embryo transfers in assisted reproductive techniques are usually performed two days after the oocyte retrieval. Delaying transfer from day two to day three or four would allow for further development of the embryo, might therefore optimize the selection of viable and best quality embryos for transfer and may be closer to the physiological time of the entry into the uterus than transfer on day two, and might have a positive effect on pregnancy outcomes. The study aimed to determine whether delayed transfer of embryos from 2 to 3 or 4 days after oocyte retrieval and the pregnancy rate in ICSI (intra cytoplasmic sperm injection) procedure. All infertile couples accepting the controlled ovarian hyper stimulation (COH) plus intracytoplasmic sperm injection (ICSI) at fatemehzahra infertility center will be randomly at the two embryo transfers methods. (Embryo transfer in the second and third day or blastocyst stage). Serum pregnancy tests were performed 14 days after retrieval in all patients. When test results were positive, a second test will performed 2 days later. A viable pregnancy will defined as a pregnancy in which there will fetal cardiac activities on ultrasound at 6-7 weeks. Inclusion criteria included the men to aged 20-60 years and women to aged 20-40 years with any cause of infertility. Also at most of the embryos transfer are three numbers and all of embryos should be A, B grade. Other data analyzed included maternal age at the time of Harvest, FSH levels within 1 year of harvest and on cycle days 2-4, number of oocytes, number of zygotes, and number of embryos transferred. After data collection, analysis carried out with test and chi squared tests. In an effort to establish the factors associated with the success of ICSI, multivariate analysis was performed based on logistic regression by using the statistical software Package, SPSS.16.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201205141760N18**

Registration date: **2012-08-15, 1391/05/25**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2012-08-15, 1391/05/25

Registrant information

Name

Nargess Gholizadeh Pasha

Name of organization / entity

Fatemehzahra Infertility Reproductive Health
Research Center, Babol University of Medical
Sciences

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Iran (Islamic Republic of)

Phone

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Recruitment status

Recruitment complete

Funding source

Vice Chancellor for Research and Technology, Babol
University of Medical Sciences

Expected recruitment start date

2011-12-22, 1390/10/01

Expected recruitment end date

2012-12-21, 1391/10/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The comparison of pregnancy rate of day 2 versus day 3 and blastocyst embryo transfer in ICSI (intra cytoplasmic sperm injection) method

Public title

The comparison of pregnancy rate of day 2 versus day 3 and blastocyst embryo transfer in ICSI (intra cytoplasmic sperm injection) method

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Infertile couples with women aged 20-40 and men aged 20-60 with any cause of infertility; Patients with B-HCG test is positive 14 days after embryo transfer.

Age

From **20 years** old to **60 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **580**

Randomization (investigator's opinion)

Randomized

Randomization description**Blinding (investigator's opinion)**

Not blinded

Blinding description**Placebo**

Used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

The ethics committee of Babol University of Medical sciences

Street address

Babol University of Medical sciences, Gangafroz Avenue

City

Babol

Postal code**Approval date**

2011-11-30, 1390/09/09

Ethics committee reference number

5224/30/ز/پ

Health conditions studied**1****Description of health condition studied**

embryo transfer

ICD-10 code

N98.3

ICD-10 code description

Complications of attempted introduction of embryo in embryo transfer

Primary outcomes**1****Description**

Pregnancy

Timepoint

Five weeks after embryo transfer

Method of measurement

SONO - Vaginal

Secondary outcomes**1****Description**

The number of embryos transferred

Timepoint

Five weeks after embryo transfer

Method of measurement

SONO - Vaginal

Intervention groups**1****Description**

Intervention: embryo transfer in the third day and blastocyst

Category

Treatment - Other

2**Description**

Control: Embryo transfer in the second day

Category

Treatment - Other

Recruitment centers**1****Recruitment center****Name of recruitment center**

Fatemehzahra Fertility & reproductive Health Reseach Center

Full name of responsible person

Marmar Firoozpour Bandepey

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Web page address**Sponsors / Funding sources****1****Sponsor****Name of organization / entity**

Vice Chancellor for Research and Technology, Babol
University of Medical Sciences

Full name of responsible person

Dr. Ali bijani

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Gangafroz Avenue, Vice Chancellor for Research and
Technology, Babol University of Medical Sciences

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Babol

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

Yes

Title of funding source

Vice Chancellor for Research and Technology, 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****Name of organization / entity**

Fatemehzahra Fertility & reproductive Health
Research Center

Full name of responsible person

Dr. Matab Zeinalzadeh

Position

Gynecologist

Other areas of specialty/work**Street address**

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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