

Clinical Trial Protocol

Iranian Registry of Clinical Trials

14 Jun 2026

The effects of intrauterine injection of human chorionic gonadotropin (HCG) before embryo transfer on fertility outcomes in infertile women undergoing Invitro fertilization (IVF).

Protocol summary

Summary

The aim of the current study is to investigate the fertility outcomes of intrauterine injection of human chorionic gonadotropin (HCG) prior to embryo transfer in infertile women undergoing In vitro fertilization (IVF). All patients younger than 40 years old referred to the infertility clinic of Shariati hospital candidate for their first IVF cycle during 2012-2013, would be approached. Patients with endometriosis, azoospermia, uterine fibroids or history of myomectomy, and those with hydrosalpingitis will be excluded. A total of two hundred recruited patients, will be randomly allocated in intervention (n=100) and control group (n=100). After starting "LONG" protocol, ovum retrieval and 2-3 days after in vitro fertilization, patient will be ready for embryo transfer. In intervention group we introduce a soft catheter and inject 0.4 cc embryo culture media fluid with 0.1 cc (500 units) HCG of coracon type to the uterus (Ferring, Düsseldorf, Germany). Embryos will be transferred using another catheter after 7 minutes. In control group 500µl embryo culture media fluid would be injected to the uterus. Embryos will be transferred using another catheter after 7 minutes. In both groups speculum will be removed after 3 minutes. Fertility outcomes, including biochemical and clinical pregnancies, will be compared between two groups. The study is double blind. Both the patient and the performer of IVF procedure are not aware of the categorizations.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201208058469N2**
Registration date: **2013-04-15, 1392/01/26**
Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2013-04-15, 1392/01/26

Registrant information

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Name of organization / entity

Tehran University of Medical Sciences

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Recruitment status

Recruitment complete

Funding source

Tehran University of Medical Sciences.

Expected recruitment start date

2012-11-21, 1391/09/01

Expected recruitment end date

2014-01-05, 1392/10/15

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effects of intrauterine injection of human chorionic gonadotropin (HCG) before embryo transfer on fertility outcomes in infertile women undergoing Invitro fertilization (IVF).

Public title

Fertility outcomes following intrauterine injection of human chorionic gonadotropin (HCG) before embryo transfer

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: All patients younger than 40 years old referred to the infertility clinic of Shariati Hospital and will undergo In vitro fertilization (IVF) for the first time.

Exclusion criteria: Patients with endometriosis, azoospermia, patients with uterine fibroids or history of myomectomy, and patients with hydrosalpingitis

Age

From **20 years** old to **40 years** old

Gender

Female

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **200**

Randomization (investigator's opinion)

Randomized

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

Double blinded

Blinding description**Placebo**

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

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

Ethics Committee of Tehran University of Medical Sciences

Street address

Tehran University of Medical Sciences, corner of Ghods St., Keshavarz Blvd., Tehran, Iran.

City

Tehran

Postal code**Approval date**

2012-11-17, 1391/08/27

Ethics committee reference number

69702

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

Infertility

ICD-10 code

N97

ICD-10 code description

inability to achieve a pregnancy sterility, female NOS

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

Pregnancy

Timepoint

4 weeks after embryo transfer

Method of measurement

detection of fetal heart rate in trans vaginal sonography

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

Implantation rate

Timepoint

3 weeks after embryo transfer

Method of measurement

number of gestational sacs in trans vaginal sonography to the number of embryos transferred in each cycle

2**Description**

ongoing pregnancy

Timepoint

continuation of pregnancy in 20 weeks

Method of measurement

sonography

3**Description**

Abortion

Timepoint

before 20 weeks

Method of measurement

sonography

4**Description**

multiple pregnancy

Timepoint

4 weeks after embryo transfer

Method of measurement

more than one sac containing fetal heart in sonography

5**Description**

ectopic pregnancy

Timepoint

4 weeks after embryo transfer

Method of measurement

sonography

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

Intrauterine injection of 0.1 cc (500 units) of human chorionic gonadotropin (HCG) (Coracon type, Ferring, Düsseldorf, Germany) before embryo transfer

Category

Treatment - Drugs

2**Description**

No intrauterine injection before embryo transfer.

Category

Treatment - Other

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

Dr. Shariati Hospital

Full name of responsible person

Dr. Mandana Rashidi Meybodi

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Dr.Shariati Hospital,Kargar-e-shomali St.,Tehran, Iran.

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Sponsors / Funding sources**1****Sponsor****Name of organization / entity**

Vice Chancellor for Research, Tehran University of Medical Sciences

Full name of responsible person

Dr.Akbar Fotouhi

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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 for Research, Tehran 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**

Tehran University of Medical Sciences.

Full name of responsible person

Dr.Mandana Rashidi Meybodi

Position

Obstetrician and Gynecologist, Infertility fellow

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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