Clinical Trial Protocol
Iranian Registry of Clinical Trials

11 Nov 2026

compairig the efficacy of intramuscular injection of HCG(human chorionic gonadotropin)before embryo transfer versus intrauterine injection with control group on clinical pregnancy in infertile women canditate for ART (Assisted Reproductive Technology)cycle

Protocol summary

Summary

Objective: to evaluate effect of hcg for luteal phase support on increasing the probability of clinical pregnancy rates in ART cycles. Design: Randomized double blind clinical trial single center Setting and conduct: 300 women refered to Shariati hospital in 2014, will be divided into three groups by means of computer generated randomization program. Intervention: Patients will receive either GnRH agonist(long protocol)or GnRH antagonist protocol. For agonist group, daily injection of Buserlin 0.5 mg subcutaneous (sc) will start on the 21st day of preceding cycle. The dose will reduce to 0.25mg on commencement of menstrual bleeding. Gonadotropin stimulating hormone(rFSH or HMG) will start on the second day of menstrual bleeding to control ovarian stimulation, dose range between 150 -450 IU. Administration of drugs will continue till 3 follicles with 18 mm. Patients who receive antagonist protocol, rFSH or HMG will start on the second day and continue till the size of follicles become 14 mm, then GnRH antagonist(Cetrotide, 0.25mg, sc) will start and continue till three follicles will reach 18mm. then 10000 IU hcg (human chorionic gonadotropin)intramuscular will administer. Ovum retrieval will undertake 36 h after hcg administeration, under sonographic guide with 17 guage needle. embryo transfer(ET) will perform on day 2 or 3 after ovum retrieval.on days of ET, 1500 IU hcg will inject for patients in one group and 500 IU hcg intrauterine will inject before ET in another group with control group . Main outcome measures variables: clinical pregnancy will be identified by development of a gestational sac. Secondary consequence: increased implantation rate.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2014050316912N2**
Registration date: **2014-11-23, 1393/09/02**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2014-11-23, 1393/09/02

Registrant information

Name

Saeedeh Gharahjeh

Name of organization / entity

Tehran University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 21 8873 6218

Email address

s-gharahgeh@razi.tums.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice Chancellor for Research, Tehran University of Medical Sceinces

Expected recruitment start date

2014-08-11, 1393/05/20

Expected recruitment end date

2014-12-22, 1393/10/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title
compairig the efficacy of intramuscular injection of HCG(human chorionic gonadotropin)before embryo transfer versus intrauterine injection with control group on clinical pregnancy in infertile women canditate for ART (Assisted Reproductive Technology)cycle

Public title
Effect of HCG (human chorionic gonadotropin) injection on clinical pregnancy in ART (Assisted Reproductive Technology) cycles

Purpose
Treatment

Inclusion/Exclusion criteria
Inclusion criteria: couples undergoing ART with their own gametes; good and high responder women; women age less than 40, FSH level less than 10 mIU/ml on third day of mense, AMH more than 1.1 ng/ml; couples having at least one embryo available for transfer. Exclusion criteria: couples undergoing ART with donation gamate; azospermia; poor responder women: women age more than 40, FSH level more than 10 mIU/ml on third day of mense, AMH less than 1.1 ng/ml and less than 4 f0llicles in previous ART cycle.

Age
From **16 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
Tehran University of Medical Sciences

Street address
Medical ethics committee, sixth floor, university central organization, Ghods street,Keshavarz avenue

City
Tehran

Postal code
14114

Approval date
2014-08-10, 1393/05/19

Ethics committee reference number
93/130/985/ص

Health conditions studied

1

Description of health condition studied
infertility

ICD-10 code
N97.4

ICD-10 code description
female infertility associated with male factor

Primary outcomes

1

Description
clinical pregnancy

Timepoint
eight weeks after intervention

Method of measurement
vaginal sonography

Secondary outcomes

1

Description
Implantation rate

Timepoint
Ten weeks after intervention

Method of measurement
vaginal sonography

Intervention groups

1

Description
The day of embryo transfer, 1500 IU hcG (human chorionic gonadotropin) will be injected intermuscular in one group

Category
Treatment - Drugs

2

Description
The day of embryo transfer, 500 IU hcG (human chorionic gonadotropin) will be injected 7 minutes before embryo transfer

Category
Treatment - Drugs

Recruitment centers

1

Recruitment center
Name of recruitment center
Dr Shariati Hospital
Full name of responsible person
Saeedeh Gharahjeh
Street address
Infertility department, second floor, Shariati Hospital, Jalal al ahmad avenue
City
Tehran

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Vice Chancellor for Research , Tehran University of Medical Sceinces
Full name of responsible person
Dr Akbar Fotouhi
Street address
Vice Chancellor for Research, Second floor, Tehran University of Medical Sciences, 16 Azar Avenue, Keshavarz Boulevard
City
Tehran
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 Sceinces
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
Saeedeh Gharahjeh
Position
Infertility Fellowship
Other areas of specialty/work
Street address
Infertility department, Second floor, Shariati Hospital, Jalal al ahmad avenue
City
Tehran
Postal code
14114
Phone
+98 21 8490 2421
Fax
Email
s-gharahgeh@razi.tums.ac.ir
Dr.gharahgeh_1388@yahoo.com
Web page address

Person responsible for scientific inquiries

Contact
Name of organization / entity
Tehran University of Medical Sciences
Full name of responsible person
Saeedeh Gharahjeh
Position
Infertility Fellowship
Other areas of specialty/work
Street address
Infertility department, Second floor, Shariati Hospital, Jalal al ahmad avenue
City
Tehran
Postal code
14114
Phone
+98 21 8490 2421
Fax
Email
s-gharahgeh@razi.tums.ac.ir
Dr.gharahgeh_1388@yahoo.com
Web page address

Person responsible for updating data

Contact
Name of organization / entity
Tehran University of Medical Sciences
Full name of responsible person
Saeedeh Gharahjeh
Position
Infertility Fellowship
Other areas of specialty/work
Street address
Infertility department, Second floor, Shariati Hospital, Jalal al ahmad avenue
City
Tehran
Postal code
14114
Phone
+98 21 8490 2421
Fax
+98 21 8822 0050
Email

s-gharahgeh@razi.tums.ac.ir
Dr.gharahgeh_1388@yahoo.com

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