Mild ovarian stimulation and poor ovarian response.

No registrations found.

Ethical review	Positive opinion
Status	Recruiting
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON24900

Source
NTR

Brief title
PRIMA

Health condition

Poor ovarian response, mild ovarian stimulation, IVF/ICSI

Sponsors and support

Primary sponsor: Academic Medical Center- University of Amsterdam- Netherlands
Source(s) of monetary or material Support: fund = initiator = sponsor

Intervention

Outcome measures

Primary outcome

Ongoing pregnancy (OPR) per women randomised (defined as a viable pregnancy of at least 10 weeks of gestation).

Secondary outcome

1. Clinical pregnancy, defined as any registered embryonic heartbeat at sonography;

2. Biochemical pregnancy ((defined as an increase in serum HCG or a positive pregnancy test);

3. Multiple pregnancy, defined as registered heartbeat of at least two foetuses at 6-8 weeks of gestation;

4. Miscarriage rate;

5. Fertilization rate;

6. Number of oocytes;

7. Number of metaphase II oocytes;

8. Number of embryos;

9. Number of ET;

10. Number of embryos frozen;

11. Total FSH dose used for ovarian stimulation;

12. Cancellation rate;

13. Drop-out rate;

14. Costs;

15. Patient discomfort/distress during IVF treatment.

Study description

Background summary

One of the most frustrating problems in IVF today is the low pregnancy rate in women with poor ovarian response. Poor responders are estimated to comprise approximately 9-24% of IVF/ICSI patients .Various stimulation protocols have been tried to improve pregnancy outcomes in poor responder women (Shanbhag et al., 2007). Since most studies included small numbers of patients and used different definitions of poor response, the best stimulation protocol is still unknown. Most treatment comparisons include high doses of gonadotropins and only vary in their means of ovarian suppression ie GnRH agonist versus antagonist or no downregulation at all. High doses of gonadotropins did not result in higher

pregnancy rates although this treatment regime appears to be the standard treatment worldwide in poor responder patients. Such a demanding protocol is more burdensome to the patient, costly and may result in embryos of lower quality.

Mild stimulation using a GnRH antagonist and a low dose of gonadotrophins may present a good alternative. Mild stimulation protocols have been shown to reduce the mean number of days of stimulation, the total amount of gonadotrophins used and the mean number of oocytes retrieved. The proportion of high quality and euploid embryos seems to be higher compared with conventional stimulation protocols and the pregnancy rate per embryo transfer is comparable. Moreover, the expected reduced costs, better tolerability for patients and shorter time needed to complete an IVF cycle make a mild approache an interesting treatment option.

Therefore, the aim of this study is to compare two strategies that present a large contrast in the stimulation dosage, i.e. a high dosage of stimulation versus a low dosage of stimulation. Our study is designed to objectively compare the ongoing pregnancy rate of mild stimulation, i.e. a GnRH antagonist short protocol with 150 IU FSH preceded by OCP (mild ovarian stimulation IVF) to a long GnRH agonist protocol with 450 IU HMG,(standard IVF), followed by replacement of two embryos in expected and non expected poor responder women. Subsequent cryopreserved transfer cycles will be included in the analysis. Expected and unexpected poor responder women will be analysed separately.

Study objective

Most treatment comparisons include high doses of gonadotropins and only vary in their means of ovarian suppression ie GnRH agonist versus antagonist or no downregulation at all. High doses of gonadotropins did not result in higher pregnancy rates although this treatment regime appears to be the standard treatment worldwide in poor responder patients. Such a demanding protocol is more burdensome to the patient, costly and may result in embryos of lower quality.

The mild stimulation using a GnRH antagonist and a low dose of gonadotrophins may present a good alternative. Mild stimulation protocols have been shown to reduce the mean number of days of stimulation, the total amount of gonadotrophins used and the mean number of oocytes retrieved. The proportion of high quality and euploid embryos seems to be higher compared with conventional stimulation protocols and the pregnancy rate per embryo transfer is comparable. Moreover, the expected reduced costs, better tolerability for patients and shorter time needed to complete an IVF cycle make a mild approache an interesting treatment option.

Study design

N/A

Intervention

Couples will be allocated 1:1 to a treatment consisting of one cycle of mild ovarian stimulation IVF-ET plus subsequent cryo-cycles or one cycle of conventional controlled ovarian hyperstimulation IVF-ET followed by plus subsequent cryo-cycles. The randomisation will be performed by computer at a central randomisation center at the IVF center.

Contacts

Public
Post Office Box 109
Mohamed A.F. Youssef
Dept. Obstetrics and Gynaecology, Kasr-Alainy Hospitals, Faculty of Medicine-Cairo University, Elmalek Al Saleh
Cairo 11559
Egypt
+20 2148088826
Scientific
Post Office Box 109
Mohamed A.F. Youssef
Dept. Obstetrics and Gynaecology, Kasr-Alainy Hospitals, Faculty of Medicine-Cairo University, Elmalek Al Saleh
Cairo 11559
Egypt
+20 2148088826

Eligibility criteria

Inclusion criteria

The couple who has a poor fertility prospects are eligible if the following apply:

1. Valid indication for IVF or ICSI;

2. Patients with expected or non expected poor response:

A. Expected;

i. Aged women of 35 years;

ii. And/or women who have a raised basal day 3 FSH level > 10 IU/mL irrespective of age;

iii. And/or women who have a low antral follicular count < 5 follicles.

B. Unexpected:

i. Women aged < 35 years old;

ii. And/or women who responded poorly during their first IVF cycle i.e. total gonadotrophin dose used > 3000 IU FSH for follicle growth ;

iii. And/or women who have low oocyte yield < 3-5 follicles despite high daily stimulation dose;

iiii. And/or women who have their IVF cycle cancelled due to a low estradiol level < 300-850 pg/ml.

3. Pre-wash total motile sperm count above 10 million or a post-wash total motile sperm count above 1 million.

Exclusion criteria

1. Women > 43 years old;

2. Polycystic ovary syndrome or any other anovulation;

3. Endocrino pathological disease like: Cushing syndrome, adrenal hyperplasia, hyperprolactinemia, acromegaly, imminent ovarian failure, premature ovarian failure, hypothalamic amenorrhea, hypothyroid, diabetes mellitus type;

4. If not willing or able to sign the consent form.

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial

Masking:	Open (masking not used)
Control:	Active

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	01-03-2011
Enrollment:	394
Type:	Anticipated

Ethics review

Positive opinion

Date:	01-03-2011
Application type:	First submission

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
NTR-new	NL2660
NTR-old	NTR2788
Other	: PRIMA 2011
ISRCTN	ISRCTN wordt niet meer aangevraagd.

Study results

Summary results
N/A