

Should clomiphene citrate (CC) or low-dose gonadotrophin therapy be the first-line treatment for anovulatory infertility associated with polycystic ovary syndrome (PCOS)? A multicentre, randomised, prospective study and cost effective analysis.

Submission date 14/02/2006	Recruitment status No longer recruiting	☐ Prospectively registered
Registration date 14/02/2006	Overall study status Completed	☐ Protocol
Last Edited 25/08/2009	Condition category Urological and Genital Diseases	☐ Statistical analysis plan
		☐ Results
		☐ Individual participant data
		☐ Record updated in last year

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number

Study information

Scientific Title

Acronym

COFFI study

Study objectives

We hypothesize that the use of low dose gonadotrophin therapy, will prove to be more efficient than CC when used as first line treatment.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Received from local medical ethics committee

Primary study design

Interventional

Study design

Multicentre randomised open label active controlled parallel group prospective study and cost effective analysis

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Polycystic Ovary Syndrome (PCOS)

Interventions

Medications:

Patients will be randomised to receive either clomiphene citrate or Puregon (Follitropine/ recombinant - Follicle Stimulating Hormone [r-FSH]) for ovulation induction (a maximum of 3 cycles of treatment will be given for the purposes of this study).

Clomiphene citrate will be given starting on day 4 of the cycle for 5 days. If no response is seen by day 17 of the cycle, it should be abandoned.

Puregon (follitropine) will be given, starting from day 4 of the cycle, until the criteria for human Chorionic Gonadotropin (hCG) administration are achieved. If these criteria are not reached following 35 days of stimulation, the cycle should be abandoned.

Monitoring:

An U/S examination of follicle number and size and endometrial thickness will be performed. HCG will be given when at least 1 follicle of >17 mm is seen on U/S examination. This applies to both treatment protocols. HCG will be withheld if a total of >3 follicles >15 mm diameter are seen on U/S.

Intervention Type

Other

Phase

Not Specified

Primary outcome(s)

1. Pregnancy rate - per patient, per cycle, cumulative over 3 cycles (hCG measurement 15 days after ovulation)
2. Miscarriage rate - embryonic, fetal (diagnosed with ultrasound)
3. Multiple pregnancy rate (number of gestational sacs measured with ultrasound)
4. Live birth rate
5. Ovulation rate (followed with ultrasound)
6. Initiation of treatment to pregnancy interval

Key secondary outcome(s)

1. Number and size of follicles >10 mm on day of hCG
2. Endometrial thickness on day of hCG
3. Estradiol and progesterone concentrations on day of hCG
4. Number of abandoned cycles (hCG withheld) due to overstimulation or lack of response
5. Ovarian hyperstimulation
6. Correlation of basal hormone concentrations with pregnancy and miscarriage rates
7. Number of units of Puregon used per cycle and per pregnancy achieved

Completion date

01/11/2008

Eligibility

Key inclusion criteria

1. The diagnosis of PCOS will be made when a history of at least 6 months inability to conceive is accompanied by at least 2 of the following:
 - 1.1. Irregular menstruation (oligo- or amenorrhea) (>35 days)
 - 1.2. Clinical or biochemical evidence of hyperandrogenism (hirsutism, acne, raised TT or FAI)
 - 1.3. Typical features of PCO on ultrasound (U/S) examination (see The Rotterdam Consensus for further details)
2. All women desiring pregnancy who conform to the definition of PCOS cited above and who have had no fertility treatment in the preceding year
3. Age <40 years
4. Patients who have previously conceived either spontaneously or on CC therapy may also be included
5. Patients with a previous history of pregnancy, whether resulting in a delivery or spontaneous abortion, a previous history of gynecological or abdominal surgical intervention or pelvic inflammatory disease, should have a normal uterine cavity and tubal patency demonstrated by radiological (HSG), laparoscopic or ultrasonic means before entering the study
6. A mandatory sperm count deemed normal by the treating physician is acceptable for inclusion. Intrauterine insemination may be employed at the discretion of the treating physician.

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Not Specified

Sex

Not Specified

Key exclusion criteria

1. Age >39 years
2. An obvious mechanical or male factor
3. Co-existing conditions such as overt diabetes mellitus, oestrogen dependent tumours, ovarian cysts, hypertension, thyroid disease, Cushings syndrome or congenital adrenal hyperplasia

Date of first enrolment

01/11/2004

Date of final enrolment

01/11/2008

Locations**Countries of recruitment**

Netherlands

Study participating centre

VU University Medical Center

Amsterdam

Netherlands

1007 MB

Sponsor information**Organisation**

VU University Medical Centre (VUMC) (Netherlands)

ROR

<https://ror.org/00q6h8f30>

Funder(s)**Funder type**

Charity

Funder Name

Gynaecology Research Foundation (Stichting Wetenschappelijk Onderzoek Gynaecologie [SWOG]) (Netherlands)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration