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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

Registration date
14/02/2006

Overall study status
Completed

Last Edited
25/08/2009

Condition category
Urological and Genital Diseases

[_] Prospectively registered
[_] Protocol
[_] 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

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers
NTR545; 04.165

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

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

Primary study design
Interventional

Secondary study design
Randomised controlled trial

Study setting(s)
Hospital

Study type(s)
Treatment

Participant information sheet

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 - Follicule 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 Choionic 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 measure
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

Secondary outcome measures
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

Overall study start date
01/11/2004

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

Age group
Not Specified

Sex
Not Specified

Target number of participants
320

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)

Sponsor details
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Sponsor type
Hospital/treatment centre

ROR
https://ror.org/00q6h8f30

Funder(s)

Funder type
Charity

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

Results and Publications

Publication and dissemination plan
Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not provided at time of registration