Effect of concomitant treatment with an androgen on sexual functioning in women using an oral contraception

Submission date	Recruitment status	Prospectively registered		
19/11/2009	No longer recruiting	☐ Protocol		
Registration date	Overall study status	Statistical analysis plan		
21/12/2009	Completed	[X] Results		
Last Edited	Condition category	Individual participant data		
14/10/2019	Pregnancy and Childbirth			

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Contact details

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Additional identifiers

Protocol serial number PR3042

Study information

Scientific Title

A double-blind, placebo controlled, randomised, comparative 2-way crossover study to determine the effect of concomitant treatment with an androgen on sexual arousability and the vascular component of the sexual arousal response during self-induced erotic fantasy and visual stimulation in women using oral contraception

Acronym

ARC-AMC study

Study objectives

To determine the effect of concomitant dehydroepiandrosterone (DHEA) compared to placebo in the two treatment groups of oral contraception (OC) users on different aspects of sexual functioning.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Medische Etische Commissie (AMC) approved on the 18th March 2007 and 13th September 2007

Study design

Double-blind placebo controlled randomised comparative 2-way crossover study

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Hormonal anticonception

Interventions

Each cycle (28 days), daily intake of:

- 1. Microgynon® (150 μ g levonorgestrel [LNG]/30 μ g ethinyl estradiol [EE]) or Yasmin® (3 mg drospirenone [DRSP]/30 μ g EE); on day 1 21
- 2. 50 mg DHEA or placebo in two tablets; on day 1 28

Pretest period: 1 cycle (no OC) Treatment period 1: 5 cycles Treatment period 2: 5 cycles

Total treatment duration: 10 cycles (each cycle: 28 days)

Intervention Type

Drug

Phase

Phase II

Drug/device/biological/vaccine name(s)

Dehydroepiandrosterone, Microgynon® (levonorgestrel [LNG], ethinyl estradiol [EE]), Yasmin® (drospirenone [DRSP], EE)

Primary outcome(s)

1. Sexual arousability, sexual desire, and frequencies of sexual fantasies as assessed with the sexual function diary completed during the last two treatment cycle of each treatment period;

each treatment period consists of 5 treatment cycles (each cycle: 28 days)

- 2. Sexual function as assessed with the Female Sexual Function Index (FSFI) and Female Sexual Distress Scale-Revised (FSDS-R), at screening, pretest, study visit at end of each treatment period
- 3. Vaginal pulse amplitude (VPA) during sexual stimulation and experience of sexual arousal during sexual stimulation, at pretest visit, study visit at end of each treatment period

Key secondary outcome(s))

- 1. Androgen parameters, measured at screening, pretest visit, study visit at end of each treatment period
- 2. Daily hassles, completed during the last two treatment cycles of each treatment period
- 3. Health diary, completed during the last two treatment cycles of each treatment period
- 4. Haemostasis metabolism, measured at screening, pretest visit, study visit at end of each treatment period
- 5. Bleeding data, measured with diary keeping during both treatment periods
- 6. Safety assessment, measured throughout the study

Completion date

01/07/2009

Eligibility

Key inclusion criteria

- 1. Healthy females between 20 and 35 years of age
- 2. Using OC for at least three consecutive cycles prior to screening
- 3. Stable, heterosexual relationship for at least 3 months prior to screening
- 4. Willing to interrupt OC use for a period of 4 weeks
- 5. Regular menstrual cycle (24 35 days) prior to last start of OC use
- 6. Body mass index (BMI) between (greater than or equal to) 18 and (less than or equal to) 35 kg/ m^2
- 7. Good physical and mental health
- 8. Sign a written informed consent agreement

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

Αll

Total final enrolment

81

Key exclusion criteria

- 1. Maudsley Marital Questionnaire (MMQ) General Marital Satisfaction Scale Score greater than or equal to 20; Symptoms Checklist-90 (SCL-90) Depression Scale score greater than or equal to 28; SCL-90 Anxiety Scale Score greater than or equal to 18
- 2. Hormonal contraception use during the 1 cycle prior to the start study medication
- 3. Use of non-oral hormonal contraception in the 3 months prior to the screening
- 4. Total T value greater than 5 nmol/L at time of screening or at the pre-test vaginal photoplethysmograph (VPP) session
- 5. Androgen therapy during the 6 months prior to screening
- 6. Intention to become pregnant during the study
- 7. Lactation and/or pregnancy in the previous 6 months prior to screening
- 8. Any clinically significant abnormality following review of medical history, laboratory results and physical examination at screening
- 9. Treatment for any major psychiatric disorder in the previous 12 months or use of antidepressant medication prior to screening
- 10. Use of one or more of the following medications: psychoactive drugs, anti-hypertensive drugs, sex steroids other than the current OC
- 11. Present use or use within 30 days before the start of the study medication of the following drugs: hydantoins, barbiturates, primidone, carbamazepine, oxcarbazepine, topiramate, troglitazone, felbamate, rifampicin, rifabutin, griseofulvin, nelfinavir, ritonavir and St John's wort (Hypericum perforatum)
- 12. Administration of any other investigational drug within 3 months prior to screening

Date of first enrolment

01/05/2007

Date of final enrolment 01/07/2009

Locations

Countries of recruitment

Netherlands

Study participating centre Meibergdreef 9 Amsterdam Netherlands 1105 AZ

Sponsor information

Organisation

Pantarhei Bioscience BV (Netherlands)

ROR

Funder(s)

Funder type

Industry

Funder Name

Pantarhei Bioscience BV (Netherlands)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/07/2018	14/10/2019	Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes