Cardiovascular risk factors in post menopausal woman: The effect of mode of delivery of hormone replacement therapy (HRT)

Submission date	Recruitment status No longer recruiting	Prospectively registered		
23/01/2004		☐ Protocol		
Registration date	Overall study status	Statistical analysis plan		
23/01/2004	Completed	[X] Results		
Last Edited 21/12/2009	Condition category Circulatory System	[] Individual participant data		

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

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

Study information

Scientific Title

Study objectives

To establish differences, if any, in alteration in cardiovascular risk factors with HRT in post menopausal women according to route of administration of HRT, oral, transdermal and implant, using first oestrogen alone then oestrogen plus norethisterone, or testosterone for implant. There is increasing use of HRT by post menopausal women. Observational epidemiological studies in the United States but no randomised controlled trials of HRT have been carried out in the primary practice setting. Previous studies of cardiovascular risk factors have shown a variety of responses according to type of progestagen and oral or topical administration. None has examined the effect of route using identical progestagen.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Not provided at time of registration

Study design

Randomised open label controlled parallel group trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Other

Study type(s)

Treatment

Participant information sheet

Health condition(s) or problem(s) studied

Hypertension, menstrual disorders and hormone replacement therapy (HRT)

Interventions

Menopausal status was confirmed and women were randomised to one of three treatment groups or acted as controls. The treatment regimes were two oral groups, with cyclical or continuous progestagen, and one transdermal regime with cyclical progestagen. The group who had had a hysterectomy received HRT by implant. Each regime lasted six months: for the first 3 months, oestradiol unopposed was given by each route; for the second three months, norethisterone was added as the progestagen, orally and transdermally as appropriate.

Measurements: Blood samples

- 1. fasting glucose
- 2. insulin
- 3. total cholesterol
- 4. high-density lipoprotein (HDL) cholesterol
- 5. low-density lipoprotein (LDL) cholesterol and triglycerides
- 6. lipoprotein (a)
- 7. follicular stimulating hormone
- 8. lutenising hormone
- 9. oestradiol
- 10. factor VII
- 11. fibrinogen
- 12. plasmin antiplasmin
- 13. thrombin anti thrombin
- 14. Von willebrand factors
- 15. E-selectin

Intervention Type

Drug

Phase

Not Specified

Drug/device/biological/vaccine name(s)

Oestradiol, norethisterone, testosterone

Primary outcome measure

- 1. Response to HRT
- 2. Anthropometric measurements
- 3. Cardiovascular Risk Factors
- 4. Blood pressure
- 5. Lipoproteins
- 6. Glucose and insulin
- 7. Clotting variables
- 8. Arterial wall factors

Secondary outcome measures

Not provided at time of registration

Overall study start date

01/02/1995

Completion date

13/03/2000

Eligibility

Key inclusion criteria

Women aged 50 - 65 years from lists in general practices local to the Charing Cross Hospital Lipid Clinic in West London.

Participant type(s)

Patient

Age group

Other

Sex

Female

Target number of participants

260 recruited (intervention group: 160, control group: 100); 161 completed (intervention group: 78, control group: 83); seperate implant group 34

Key exclusion criteria

Women with liver, renal or endocrine abnormalities were excluded, as were those on lipid altering medication.

Date of first enrolment

01/02/1995

Date of final enrolment

13/03/2000

Locations

Countries of recruitment

England

United Kingdom

Study participating centre Cardiovascular Medicine

London United Kingdom W6 8RF

Sponsor information

Organisation

Record Provided by the NHS R&D 'Time-Limited' National Programme Register - Department of Health (UK)

Sponsor details

The Department of Health Richmond House

79 Whitehall London United Kingdom SW1A 2NL

Sponsor type

Government

Website

http://www.doh.gov.uk

Funder(s)

Funder type

Government

Funder Name

NHS Cardiovascular Disease and Stroke National Research and Development Programme (UK)

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

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/12/2000		Yes	No