11C- metomidate positron emission tomography (PET) scanning for Conn's syndrome

Submission date	Recruitment status	Prospectively registered	
12/05/2010	No longer recruiting	☐ Protocol	
Registration date 12/05/2010	Overall study status Completed	Statistical analysis plan	
		[X] Results	
Last Edited	Condition category	Individual participant data	
02/06/2015	Nutritional. Metabolic. Endocrine		

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 6936

Study information

Scientific Title

Hypertension due to Conn's adenoma - the localisation of adrenal cortical adenomas by 11C-metomidate PET scanning following dexamethasone and fludrocortisone suppression

Study objectives

In order to ensure appropriate treatment, it is important to be able to identify Conn's adenoma reliably from other adrenal conditions. Current identification techniques, such as adrenal venous sampling, are time consuming, often invasive and probematic making treatment decisions difficult. It is proposed that non-invasive PET/CT scanning using 11C-metomidate as a radiomarker will identify people with Conn's adenoma as well as currently used invasive techniques.

More details can be found here: http://public.ukcrn.org.uk/Search/StudyDetail.aspx? StudyID=6936

Ethics approval required

Old ethics approval format

Ethics approval(s)

Cambridgeshire 4 Research Ethics Board, 12/05/2008, ref: 08/H0305/20

Study design

Single-centre non-randomised treatment trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Topic: Metabolic and Endocrine; Subtopic: Metabolic and Endocrine (all Subtopics); Disease: Metabolic & Endocrine (not diabetes)

Interventions

In addition to standard investigations for suspected Conn's adenoma, each participant will undergo a positron emission tomography (PET)/computed tomography (CT) scan with intravenous 11C-metomidate (500 MBq) as a radio-label. The first 6 participants will undergo 3 scans to evaluate which suppression protocol produces the clearest image:

- 1. Without any additional drug therapies
- 2. Oral 0.5 mg dexamethosone 6-hourly for 48 hours prior to scan
- 3. Oral 0.5 mg dexamethosone 6-hourly for 48 hours prior to scan with the addition of 400 μg of fludrocortisone for 3 days prior to the scan

Intervention Type

Other

Phase

Phase IV

Primary outcome(s)

The sensitivity of 11C-metamidate PET/CT scanning for detecting Conn's adenoma

Key secondary outcome(s))

- 1. The specificity of 11C-metomidate PET/CT scanning for detecting Conn's Syndrome
- 2. To determine the suppression protocol that leads to the best sensitivity of 11C-metomidate PET/CT scanning for detecting Conn's Syndrome

Completion date

30/04/2012

Eligibility

Key inclusion criteria

- 1. Male or female
- 2. Aged 18 years or over
- 3. Suspected Conn's syndrome or suspected adrenal hyperplasia or healthy with non-functional adenoma

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

All

Key exclusion criteria

- 1. Inability to give informed consent
- 2. Heart failure
- 3. Women of childbearing potential not using contraception
- 4. Pregnant or breast feeding women

Date of first enrolment

17/04/2009

Date of final enrolment

30/04/2012

Locations

Countries of recruitment

United Kingdom

England

Study participating centre Addenbrooke's Hospital Cambridge United Kingdom CB2 0QQ

Sponsor information

Organisation

Cambridge University Hospitals NHS Foundation Trust (UK)

ROR

https://ror.org/04v54gj93

Funder(s)

Funder type

Charity

Funder Name

British Heart Foundation (BHF) (UK)

Alternative Name(s)

the_bhf, The British Heart Foundation, BHF

Funding Body Type

Private sector organisation

Funding Body Subtype

Trusts, charities, foundations (both public and private)

Location

United Kingdom

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 ad	ded Peer reviewe	d? Patient-facing?
Results article	results	01/01/2012	Yes	No
Participant information sheel	Participant information sheet	11/11/2025 11/11/2	025 No	Yes