

The biological variation of insulin resistance and cardiovascular risk factors in patients with non-alcoholic fatty liver disease compared to type 2 diabetes

Submission date

27/04/2009

Recruitment status

Stopped

☐ Prospectively registered

☐ Protocol

Registration date

13/05/2009

Overall study status

Stopped

☐ Statistical analysis plan

☐ Results

Last Edited

18/06/2013

Condition category

Nutritional, Metabolic, Endocrine

☐ Individual participant data

☐ Record updated in last year

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

Prof Stephen Atkin

Contact details

HS Brocklehurst Building

Hull Royal Infirmary

Anlaby Road

Hull

United Kingdom

HU3 2RW

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

Study information

Scientific Title

The biological variation of insulin resistance and cardiovascular risk factors in patients with non-alcoholic fatty liver disease compared to type 2 diabetes: an observational prospective study

Acronym

BV NASH-T2DM

Study objectives

Patients with Non-alcoholic Fatty Liver Disease (NAFLD) have at least as great intra-individual variance of insulin resistance measured using the homeostasis model assessment (HOMA-IR) as those with the paradigm of insulin resistance; Type 2 Diabetes.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Hull and East Riding Research Ethics Committee, approved on 13/03/2009 (ref: LREC 09/H1304 /2).

Study design

Observational prospective cross-sectional study

Primary study design

Observational

Secondary study design

Cross-section survey

Study setting(s)

Hospital

Study type(s)

Other

Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

Health condition(s) or problem(s) studied

Non-alcoholic fatty liver disease and type 2 diabetes

Interventions

18/06/2013: Please note that this trial was stopped in April 2011.

Twenty type 2 diabetes patients and 20 NAFLD/NASH patients will be recruited for this study (total n = 40).

Over 5 weeks fasting blood samples taken to determine the biological variation of insulin resistance and clotting structure and function and on one occasion endothelial function will be measured using Endo-PAT2000® in the 2 groups - NASH/NAFLD and type 2 diabetes.

Intervention Type

Other

Phase

Not Applicable

Primary outcome measure

To determine the biological variation of insulin resistance measured by HOMA in patients with NAFLD compared to type 2 diabetes.

Secondary outcome measures

1. To show statistically significant greater intra-individual variance of insulin resistance measured by HOMA in patients with NASH
2. To determine the level of endothelial dysfunction in subjects with NASH compared to NAFLD compared to type 2 diabetes
3. To determine the fibrin clot structure and function in subjects with NAFLD/NASH compared to type 2 diabetes

Overall study start date

14/04/2009

Completion date

30/09/2010

Reason abandoned (if study stopped)

Participant recruitment issue

Eligibility**Key inclusion criteria**

For both groups:

Both males and females, over age of 16 years

For NAFLD/non-alcoholic steatohepatitis (NASH) group:

1. Patients with confirmed NAFLD/NASH
2. Able to give informed consent
3. Agreeing to consent to inform GP's regarding participation in the study
4. No change in medication for 3 months prior to starting the study

For type 2 diabetes group:

1. Diabetes diagnosed according to World Health Organization (WHO) criteria
2. No change in medication for 3 months prior to starting study

Participant type(s)

Patient

Age group

Adult

Sex

Both

Target number of participants

40

Key exclusion criteria

For NAFLD/NASH group:

1. Patients with concurrent illnesses
2. Patients not wishing to allow disclosure to their GP's
3. Alcohol intake more than 14 units/week for women, 21 units a week for men
4. Diabetic patients
5. Pregnancy or breastfeeding women
6. Smokers

For type 2 diabetes group:

1. Abnormal results from liver function tests (LFTs)
2. Patients with concurrent illnesses
3. Patients not wishing to allow disclosure to their GP's
4. Alcohol intake more than 14 units/week for women, 21 units a week for men
5. Pregnancy or breastfeeding women
6. Smokers

Date of first enrolment

14/04/2009

Date of final enrolment

30/09/2010

Locations**Countries of recruitment**

England

United Kingdom

Study participating centre

HS Brocklehurst Building

Hull

United Kingdom

HU3 2RW

Sponsor information

Organisation

Hull and East Yorkshire Hospitals NHS Trust (UK)

Sponsor details

Daisy Building
Castle Hill Hospital
Cottingham
England
United Kingdom
HU16 5JQ

Sponsor type

Hospital/treatment centre

Website

<http://www.hey.nhs.uk>

ROR

<https://ror.org/01b11x021>

Funder(s)**Funder type**

University/education

Funder Name

Diabetes Endowment Fund, University of Hull (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