

Development of novel magnetic resonance imaging (MRI) techniques for neurological applications

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| Submission date 21/05/2010 | Recruitment status No longer recruiting | <input type="checkbox"/> Prospectively registered |
| Registration date 21/05/2010 | Overall study status Completed | <input type="checkbox"/> Protocol |
| Last Edited 08/08/2016 | Condition category Nervous System Diseases | <input type="checkbox"/> Statistical analysis plan |
| | | <input type="checkbox"/> Results |
| | | <input type="checkbox"/> Individual participant data |
| | | <input type="checkbox"/> 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

Protocol serial number
5580

Study information

Scientific Title

Development of novel magnetic resonance imaging (MRI) techniques for neurological applications

Study objectives

Quantitative magnetic resonance imaging (MRI) techniques may provide additional information in the understanding of several neurological and psychiatric disorders. The development of some of these techniques is still incomplete and the interpretation of results in pathology is thus limited. Scanning healthy subjects and analysing their data will help in making the scanning techniques suitable for clinical applications. This is an ongoing process of continual testing and optimisation.

Ethics approval required

Old ethics approval format

Ethics approval(s)

MREC, ref: 05/Q0502/101

Study design

Single-centre non-randomised observational diagnosis and screening study

Primary study design

Observational

Study type(s)

Screening

Health condition(s) or problem(s) studied

Topic: Neurological; Subtopic: Neurological (all Subtopics); Disease: Nervous system disorders

Interventions

Routine MRI examinations only provide qualitative images of the brain. Quantitative MRI techniques, such as MR spectroscopy (MRS), magnetisation transfer imaging (MTI), diffusion imaging (DI), perfusion imaging (PI) and relaxometry can be particularly useful in the investigation of the pathological substrate of several diseases. Their usefulness is well documented in the literature; however, their application is somehow limited by technical problems.

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

1. Magnetic resonance imaging (MRI)
2. MR spectroscopy (MRS)
3. Magnetisation transfer imaging (MTI)
4. Diffusion imaging (DI)
5. Perfusion imaging (PI)

Key secondary outcome(s)

Not provided at time of registration

Completion date

31/07/2009

Eligibility**Key inclusion criteria**

Not provided at time of registration

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Not Specified

Sex

Not Specified

Key exclusion criteria

Not provided at time of registration

Date of first enrolment

01/01/2006

Date of final enrolment

31/07/2009

Locations**Countries of recruitment**

United Kingdom

England

Study participating centre

The Institute of Neurology

London

United Kingdom

WC1N 3BG

Sponsor information

Organisation

University College London (UCL) (UK)

ROR

<https://ror.org/02jx3x895>

Funder(s)**Funder type**

Charity

Funder Name

Multiple Sclerosis Society (UK)

Alternative Name(s)

mssocietyuk, MS Society UK, Multiple Sclerosis Society UK, Multiple Sclerosis Society of Great Britain and Northern Ireland, The MS Society, MS Society

Funding Body Type

Private sector organisation

Funding Body Subtype

Associations and societies (private and public)

Location

United Kingdom

Results and Publications**Individual participant data (IPD) sharing plan****IPD sharing plan summary**

Not provided at time of registration