

Doxycycline And Rifampin for Alzheimer's Disease

Submission date 06/10/2006	Recruitment status No longer recruiting	☐ Prospectively registered
Registration date 06/10/2006	Overall study status Completed	☐ Protocol
Last Edited 19/08/2020	Condition category Nervous System Diseases	☐ Statistical analysis plan
		☒ Results
		☐ Individual participant data

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
MCT-79779

Study information

Scientific Title
Multi-centre, blinded, randomised, controlled trial comparing different regimens of the antibiotics Doxycycline and Rifampin for treatment of Alzheimer's Disease

Acronym

DARAD

Study objectives

Treatment with doxycycline and rifampin will slow or stop the progression of Alzheimers disease compared to those taking a placebo.

Primary objective:

To determine the impact of rifampin and doxycycline, over a one year period on cognition, function, mood, and behaviour.

Secondary objective:

To determine if treatment with either doxycycline or rifampin alone is as efficacious as the combined treatment.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Ethics approval received from the Research Ethics Board of Hamilton Health Sciences and McMaster University (Canada) on the 11th April 2006

Primary study design

Interventional

Study design

Multi-centre, randomised factorial, four leg trial using placebo, with study participant, investigator, caregiver, outcome assessor and data analyst blinded.

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Alzheimer's disease

Interventions

Experimental group 1: Doxycycline 100 mg twice daily (b.i.d.) plus placebo matched to rifampin 300 mg once daily (o.d.) for 12 months

Experimental group 2: Rifampin 300 mg o.d. plus placebo matched to doxycycline 100 mg b.i.d. for 12 months

Experimental group 3: Doxycycline 100 mg b.i.d. for 12 months plus placebo matched to rifampin 300 mg o.d. for 12 months

Control group: Placebo matched to doxycycline containing microcrystalline cellulose 100 mg b.i.d. plus rifampin containing microcrystalline cellulose 300mg o.d. for 12 months

The public contact for this trial is:

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Intervention Type

Drug

Phase

Not Specified

Drug/device/biological/vaccine name(s)

Doxycycline and rifampin

Primary outcome(s)

1. Standardised Alzheimer's Disease Assessment Scale - Cognitive Subscale (SADAS-cog), measured at 12 months
2. Clinical Dementia Rating Scale (CDR), measured at 12 months

Key secondary outcome(s)

1. SMMSE, measured at 12 months
2. AB Cognitive Screen 100 (ABCS 100), measured at 12 months
3. Geriatric Depression Scale (GDS), measured at 12 months
4. Lawton Scale, measured at 12 months
5. Dysfunctional Behaviour Rating Instrument (DBRI), measured at 12 months

Completion date

30/11/2009

Eligibility

Key inclusion criteria

1. Probable Alzheimer's disease
2. Aged 50 - 99 years old, either sex
3. Standardised Mini Mental State Examination (SMMSE) score 14 to 26 inclusive
4. Consenting patient (or Power of Attorney [POA] consents for patient)
5. Consenting caregiver
6. Sufficient English to complete standardised testing in English
7. May reasonably be expected to complete a one year trial

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Key exclusion criteria

1. Other neuro-degenerative diseases such as Lewy body, Parkinson's, fronto-temporal, Huntington's Chorea, Down's Syndrome or Creutzfeldt Jacob Disease
2. Cognitive impairment due to acute cerebral trauma, subdural haematoma, injuries from chronic trauma, hypoxic cerebral damage
3. B12 deficiency, cancer or infections e.g. acquired immune deficiency syndrome (AIDS)
4. Endocrine deficiencies
5. Hypercalcemia, hypothyroidism, hyperparathyroidism, Cushing's syndrome, severe renal failure, poorly controlled diabetes mellitus, pituitary disease, etc.
6. Mental retardation
7. Significant cerebrovascular disease or multi-infarct dementia
8. Intra-cranial pathology, tumour or hydrocephalus
9. Co-existing medical conditions such as history of epilepsy or convulsions
10. Clinically significant psychiatric conditions or moderate to severe behavioural disturbances
11. Clinically significant hepatic, renal, pulmonary, metabolic or endocrine diseases
12. History of drug or alcohol abuse
13. History of myasthenia gravis
14. Clinically significant cardiac disease such as cardiac surgery in the past six months, unstable angina or poorly controlled congestive heart failure, uncontrolled hypertension with systolic pressure greater than 180 mmHg or diastolic pressure greater than 110 mmHg
15. Anti-dementia treatments except donepezil, galantamine, rivastigmine, memantine, acetylsalicylic acid (ASA) up to 650 mg OD, Vitamin E 400 i.u., multi B vitamins, Ginkgo biloba, Cyclooxygenase Type II (Cox II) inhibitors or statins
16. Other investigational drugs
17. Long-term antibiotics
18. Allergy to doxycycline or rifampin

Date of first enrolment

01/05/2006

Date of final enrolment

30/11/2009

Locations

Countries of recruitment

Canada

Study participating centre

St.Peter's Hospital

Ontario

Canada

L8M 1W9

Sponsor information

Organisation

McMaster University (Canada)

ROR

<https://ror.org/02fa3aq29>

Funder(s)**Funder type**

Research organisation

Funder Name

Canadian Institutes of Health Research (CIHR) (Canada) - <http://www.cihr-irsc.gc.ca> (ref: MCT-79779)

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	01/05/2013		Yes	No
Results article	results	01/05/2019	19/08/2020	Yes	No