

Stroke at younger ages

Submission date 22/01/2024	Recruitment status Recruiting	<input checked="" type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 01/02/2024	Overall study status Ongoing	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
Last Edited 03/03/2026	Condition category Cancer	<input type="checkbox"/> Individual participant data <input checked="" type="checkbox"/> Record updated in last year

Plain English summary of protocol

Background and study aims

We have seen a doubling in the number of new stroke cases in adults under the age of 55 years in the last 10 years in the UK and in other high-income countries. However, the reasons for this increase remain unclear. The aim of this study is to find out how traditional stroke risk factors that are more common at older ages, such as high blood pressure, diabetes, high cholesterol level, smoking and obesity, might contribute to the occurrence of stroke at younger ages. The researchers are also hoping to find out if emerging stroke risk factors also play a role in the rising number of young stroke cases, such as long working hours, stress and mental health conditions.

Who can participate?

Adult patients aged between 18-54 years with diagnosed stroke

What does the study involve?

The study will involve a short questionnaire (about 30 minutes) through an interview with the local study team, where they will collect information on participants' past medical history, lifestyle-related factors, family history, birth history, and other stroke risk factors. The research team will also collect relevant information about the stroke episode. The interview can be done face-to-face during the hospital stay or by phone after participants are discharged. All patients will undergo centralised administrative follow-up via record linkage for up to 30 years.

What are the possible benefits and risks of participating?

The study only includes a short questionnaire and there are no unlikely foreseeable risks associated.

Where is the study run from?

Oxford University (UK)

When is the study starting and how long is it expected to run for?

October 2023 to December 2056

Who is funding the study?

1. Oxford University (UK)
2. Oxford BRC (UK)
3. Wellcome Trust (UK)

Who is the main contact?

Dr Linxin Li, linxin.li@ndcn.ox.ac.uk

Contact information

Type(s)

Public, Scientific, Principal investigator

Contact name

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Contact details

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Additional identifiers

Integrated Research Application System (IRAS)

328197

Study information

Scientific Title

National Young Stroke Study

Acronym

NYSS

Study objectives

The primary objectives of this study are to provide up-to-date and reliable estimates of the associations of traditional modifiable risk factors and emerging risk factors and young stroke.

Ethics approval required

Ethics approval required

Ethics approval(s)

approved 22/01/2024, North West - Greater Manchester South Research Ethics Committee (3rd Floor, Barlow House, 4 Minshull Street, Manchester, M1 3DZ, United Kingdom; +44 (0)207 104 8278; gmsouth.rec@hra.nhs.uk), ref: 24/NW/0003

Study design

Prospective cohort study

Primary study design

Observational

Study type(s)

Prevention, Quality of life

Health condition(s) or problem(s) studied

Stroke

Interventions

The study will involve a short questionnaire (about 30 minutes) through an interview with the local study team, where they will collect information on participants' past medical history, lifestyle-related factors, family history, birth history, and other stroke risk factors. The research team will also collect relevant information about the stroke episode. The interview can be done face-to-face during the hospital stay or by phone after participants are discharged. All patients will undergo centralised administrative follow-up via record linkage for up to 30 years.

Intervention Type

Other

Primary outcome(s)

1. Traditional vascular risk factors (e.g. hypertension, diabetes, hyperlipidaemia, obesity, smoking, alcohol excess) measured using questionnaire/medical records at baseline
2. Emerging risk factors (e.g. depression, anxiety and other mental health conditions, long working hours, stress, autoimmune conditions, oral health) measured using questionnaire /medical records at baseline

Key secondary outcome(s)

1. Long-term vascular (recurrent stroke, myocardial infarction, dementia and vascular death) and non-vascular outcomes (cancer and mental health conditions) measured using medical record linkage at 5, 10, 20 and 30 years
2. Stroke severity measured using National Institutes of Health Stroke Scale (NIHSS) at baseline
3. Disability measured using modified Rankin scale at baseline in the first instance
4. Quality of life measured using EQ-5D at baseline in the first instance

Completion date

31/12/2056

Eligibility

Key inclusion criteria

1. Patient is willing and able to give informed consent for participation in the study, or favourable consultee advice for adults lacking capacity

OR

If consent or consultee advice was not feasible, CAG/Section 251 support for data collection

2. Male or Female, aged 18 to 54 years

3. A diagnosis of ischaemic stroke (including retinal artery occlusion)

OR

A diagnosis of intracerebral haemorrhage

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Upper age limit

54 years

Sex

All

Total final enrolment

0

Key exclusion criteria

1. Intracerebral haemorrhage as a result of trauma

2. Ischaemic stroke or intracerebral haemorrhage as a result of cerebral venous thrombosis

Date of first enrolment

01/01/2026

Date of final enrolment

31/12/2029

Locations

Countries of recruitment

United Kingdom

England

Study participating centre

Thames Valley & South Midlands CRN

-

-

England

N/A

Study participating centre

North East and North Cumbria CRN

-

-

England

N/A

Study participating centre

North West Coast CRN

-

-

England

N/A

Study participating centre

Yorkshire and Humber CRN

-

-

England

N/A

Study participating centre

Greater Manchester CRN

-

-

England

N/A

Study participating centre

East Midlands CRN

-

-

England

N/A

**Study participating centre
West Midlands CRN**

-

-

England
N/A

**Study participating centre
West of England CRN**

-

-

England
N/A

**Study participating centre
East of England CRN**

-

-

England
N/A

**Study participating centre
Kent, Surrey and Sussex CRN**

-

-

England
N/A

**Study participating centre
Wessex CRN**

-

-

England
N/A

**Study participating centre
South West Peninsula CRN**

-

-

England
N/A

Study participating centre
North Thames CRN

-

-

England
N/A

Study participating centre
South London CRN

-

-

England
N/A

Study participating centre
North West London CRN

-

-

England
N/A

Study participating centre
Wolfson Centre for Prevention of Stroke and Dementia, NDCN, Oxford University
Wolfson Building
John Radcliffe Hospital
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OX3 9DU

Sponsor information

Organisation
University of Oxford

ROR
<https://ror.org/052gg0110>

Funder(s)

Funder type

University/education

Funder Name

University of Oxford

Alternative Name(s)

St Cross College, University of Oxford

Funding Body Type

Private sector organisation

Funding Body Subtype

Universities (academic only)

Location

United Kingdom

Funder Name

NIHR Oxford Biomedical Research Centre

Alternative Name(s)

NIHR Biomedical Research Centre, Oxford, OxfordBRC, OxBRC

Funding Body Type

Private sector organisation

Funding Body Subtype

Research institutes and centers

Location

United Kingdom

Funder Name

Wellcome Trust

Alternative Name(s)

Wellcome, WT

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**

Data sharing statement to be made available at a later date