

The effect of transfusion on cerebral oxygenation in traumatic brain injury

Submission date
08/09/2005

Recruitment status
No longer recruiting

☐ Prospectively registered

☐ Protocol

Registration date
06/10/2005

Overall study status
Completed

☐ Statistical analysis plan

☒ Results

Last Edited
03/03/2009

Condition category
Injury, Occupational Diseases, Poisoning

☐ Individual participant data

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

Contact name
Prof Arun Gupta

Contact details
Department of Anaesthesia
Box 93
Cambridge
United Kingdom
CB2 2QQ
akg01@globalnet.co.uk

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers
LREC 02/191

Study information

Scientific Title

The effect of transfusion on cerebral oxygenation in traumatic brain injury: a randomised controlled trial

Study objectives

Blood transfusion does not affect brain oxygenation in traumatic brain injury.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Not provided at time of registration

Study design

Randomised controlled trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Hospital

Study type(s)

Treatment

Participant information sheet**Health condition(s) or problem(s) studied**

Traumatic brain injury

Interventions

Blood transfusion - the patients are randomised to 3 different transfusion triggers

Intervention Type

Other

Phase

Not Applicable

Primary outcome measure

Brain tissue oxygen partial pressure.

Secondary outcome measures

1. Jugular venous saturation
2. Lactate/pyruvate ratio
3. Neurological outcome
4. Cerebral haemodynamics

Overall study start date

01/07/2002

Completion date

01/12/2005

Eligibility

Key inclusion criteria

1. Greater than 16 years of age
2. Severe traumatic brain injury (i.e. traumatic brain injury resulting in a resuscitated Glasgow coma score of less than or equal to 8, resulting in intracranial hypertension (greater than 20 mmHg for greater than 10 minutes), or requiring neurosurgical intervention
3. Informed assent from the next of kin

Participant type(s)

Patient

Age group

Adult

Sex

Both

Target number of participants

30

Key exclusion criteria

1. Active haemorrhage
2. Active coronary ischaemia as judged by dynamic electrocardiogram (ECG) changes or positive troponin levels not due to myocardial contusion
3. Inability to place cerebral oxygenation monitors
4. Failure to fall below allocated transfusion threshold during intracranial pressure (ICP) monitoring

Date of first enrolment

01/07/2002

Date of final enrolment

01/12/2005

Locations

Countries of recruitment

England

United Kingdom

Study participating centre
Department of Anaesthesia
Cambridge
United Kingdom
CB2 2QQ

Sponsor information

Organisation

Cambridge University Hospitals NHS Foundation Trust (UK)

Sponsor details

Addenbrooke's Hospital
Hills Road
Cambridge
England
United Kingdom
CB2 2QQ
jn254@cam.ac.uk

Sponsor type

Hospital/treatment centre

Website

<http://www.cuh.org.uk/>

ROR

<https://ror.org/04v54gj93>

Funder(s)

Funder type

Research organisation

Funder Name

Association of Anaesthetists of Great Britain and Ireland (UK)

Funder Name

Intensive Care Society (UK)

Alternative Name(s)

ICS

Funding Body Type

Private sector organisation

Funding Body Subtype

Associations and societies (private and public)

Location

United Kingdom

Funder Name

Codman (Johnson & Johnson) (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

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/03/2009		Yes	No