

# Prevention Of Morbidity In Sickle cell disease pilot phase

<b>Submission date</b> 19/11/2006	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
		<input type="checkbox"/> Protocol
<b>Registration date</b> 12/01/2007	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan
		<input checked="" type="checkbox"/> Results
<b>Last Edited</b> 10/09/2019	<b>Condition category</b> Haematological Disorders	<input type="checkbox"/> Individual participant data

**Plain English summary of protocol**  
Not provided at time of registration

**Study website**  
[http://www.stroke.org.uk/research/funded\\_research/research\\_projects\\_programme\\_grants/research\\_region/london/preventing.html](http://www.stroke.org.uk/research/funded_research/research_projects_programme_grants/research_region/london/preventing.html)

## Contact information

**Type(s)**  
Scientific

**Contact name**  
Prof Fenella Kirkham

**Contact details**  
Neuroscience Unit  
Institute of Child Health  
30 Guilford Street  
London  
United Kingdom  
WC1N 1EH

## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**  
NCT00415727

## Secondary identifying numbers

99-NR-31

# Study information

## Scientific Title

Prevention Of Morbidity In Sickle cell disease pilot phase

## Acronym

POMS

## Study objectives

In sickle cell anaemia, nocturnal oxyhaemoglobin desaturation is associated with low processing speed index, and this morbidity can be reduced with overnight auto Continuous Positive Airways Pressure (CPAP) and/or oxygen supplementation.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

St Marys Hospital Research Ethics Committee has approved the pilot phase of this study on the 25th September 2006 (ref: 06/Q0403/133).

## Study design

Randomised single blind 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

Sickle cell anaemia

## Interventions

Overnight auto Continuous Positive Airways Pressure (CPAP) with oxygen supplementation if mean overnight oxyhaemoglobin saturation is not more than 94% after two weeks of autoCPAP versus no treatment.

## Intervention Type

Other

**Phase**

Not Specified

**Primary outcome measure**

Change in processing speed index.

**Secondary outcome measures**

1. Frequency of pain measured via SMS and pain diary
2. Adverse events e.g. headache, anorexia, weight loss, nausea, vomiting, reduction in steady state red or white cell count
3. Change in blood pressure
4. Number of omissions on Conners Continuous Performance Test
5. Change in Chervin sleep questionnaire
6. Change in Behaviour Rating Inventory of Executive Function (BRIEF)
7. Change in number of abnormalities (Adam's criteria) on Trans Cranial Doppler (TCD)

**Overall study start date**

01/11/2006

**Completion date**

31/10/2007

**Eligibility****Key inclusion criteria**

1. Age more than four years old
2. Informed consent with assent in accordance with UK ethical committee (Central Office for Research Ethics Committees [COREC]) system must be signed by the patient's parent or legally authorised guardian acknowledging written consent to join the study. When suitable, patients will be requested to give their assent to join the study
3. Haemoglobin SS (homozygous sickle cell anaemia) diagnosed by standard techniques. Participating institutions must submit documentation of the diagnostic haemoglobin analysis

**Participant type(s)**

Patient

**Age group**

Not Specified

**Sex**

Not Specified

**Target number of participants**

22

**Key exclusion criteria**

1. Existing respiratory failure
2. Decompensated cardiac failure
3. History of severe epistaxis
4. Trans-sphenoidal surgery, or trauma that could have left a cranio-nasopharyngeal fistula

5. Perforated ear drum
6. Bullous lung disease
7. Bypassed upper airway
8. Pneumothorax
9. Pathologically low blood pressure
10. Cerebral Spinal Fluid (CSF) leaks, abnormalities of the cribriform plate, prior history of head trauma, and/or pneumocephalus
11. Patients on chronic regular blood transfusion
12. Patient who received treatment with anti-sickling drugs or hydroxyurea within three months
13. Patient with other neurological problems, such as neurofibromatosis, lead poisoning, or tuberous sclerosis
14. Pregnancy
15. Sinus or middle ear infection (temporary)

**Date of first enrolment**

01/11/2006

**Date of final enrolment**

31/10/2007

## **Locations**

**Countries of recruitment**

England

United Kingdom

**Study participating centre****Neuroscience Unit**

London

United Kingdom

WC1N 1EH

## **Sponsor information**

**Organisation**

Institute of Child Health (UK)

**Sponsor details**

c/o Ms Emma Pendleton

Director of Research and Development

30 Guilford Street

London

England

United Kingdom

WC1N 1EH

**Sponsor type**

University/education

**Website**

<http://www.ich.ucl.ac.uk/ich/>

**ROR**

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

## Funder(s)

**Funder type**

Charity

**Funder Name**

The Stroke Association (PROG 4) (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?
<a href="#">Results article</a>	results	01/07/2009		Yes	No