Is magnesium an effective treatment for organophosphate poisoning?

Submission date	Recruitment status	[X] Prospectively registered
31/07/2006	No longer recruiting	Protocol
Registration date	Overall study status	Statistical analysis plan
31/07/2006	Completed	Results
Last Edited	Condition category	Individual participant data
05/02/2015	Injury, Occupational Diseases, Poisoning	Record updated in last year

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

071669

Study information

Scientific Title

Is magnesium an effective treatment for organophosphate poisoning?

Study objectives

Is magnesium effective in reducing mortality from acute Organophosphate Poisoning (OP)?

Due to a delay to the beginning of the trial, the overall trial start date is now 03/03/2007. The overall trial end date was also therefore changed to 03/03/2009.

Ethics approval required

Old ethics approval format

Ethics approval(s)

- 1. Sri Lankan Medical Association Ethical Review Committee (Approval ERC/05-005), 05/08/2005.
- 2. Australian National University Human Ethics Research Committee (Approval 2005/195), 29/10/2005

Study design

Multicentre double-blind 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

Organophosphate poisoning

Interventions

We plan to conduct a double-blind randomised controlled trial of the effectiveness of early magnesium treatment in preventing death. Patients will be randomised to magnesium sulphate or a placebo in a 2:1 ratio. (i.e 200 patients will receive magnesium and 100 patients will receive placebo).

All patients will continue to receive standard treatment. This standard treatment is determined by the attending physician who maintains clinical responsibility for all patients. While there may be some minor variation between hospitals current care consists of patient resuscitation,

gastrointestinal decontamination when indicated, atropinisation and the use of pralidoxime (typically one gram every six hours). All treatment is recorded by the research team. This intervention represents an added treatment to the existing standard of care.

Intervention Type

Drug

Phase

Not Specified

Drug/device/biological/vaccine name(s)

Magnesium

Primary outcome measure

The primary outcome will be the number of patients dying in those receiving magnesium versus those receiving placebo.

Secondary outcome measures

Secondary outcomes will include need for ventilation, blood pressure, level of consciousness and duration of atropine therapy. Adverse events reported by doctors will be rated by them as to the likelihood of them being due to magnesium infusion (certain, probable, possible, unlikely).

Overall study start date

30/08/2006

Completion date

03/03/2009

Eligibility

Key inclusion criteria

Patients with symptomatic acute OP

Participant type(s)

Patient

Age group

Adult

Sex

Both

Target number of participants

300

Kev exclusion criteria

- 1. Patients who do not consent
- 2. Pregnant women
- 3. Patients less than 16 years of age
- 4. Patients who are hypotensive (blood pressure less than 90/50 mmHg) on presentation and not

responding to intravenous (iv) fluids and atropine

- 5. Patients who have ingested other substances in addition to OP
- 6. Patients with other major medical conditions (e.g. cardiovascular disease renal or hepatic failure)

Date of first enrolment

30/08/2006

Date of final enrolment

03/03/2009

Locations

Countries of recruitment

Sri Lanka

Study participating centre

SACTRC

Peradeniya Sri Lanka 20000

Sponsor information

Organisation

South Asian Clinical Toxicology Research Collaboration (SACTRC) (Sri Lanka)

Sponsor details

Department of Medicine University of Peradeniya Perideniya Sri Lanka 20000 +94 (0)81 238 4556 adawson@sactrc.org

Sponsor type

Research organisation

Website

http://www.sactrc.org

ROR

https://ror.org/04z435g27

Funder(s)

Funder type

Charity

Funder Name

Wellcome Trust

Alternative Name(s)

Funding Body Type

Private sector organisation

Funding Body Subtype

International organizations

Location

United Kingdom

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