

# Magnesium sulphate in Tetanus

<b>Submission date</b> 27/08/2006	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
<b>Registration date</b> 05/09/2006	<b>Overall study status</b> Completed	<input type="checkbox"/> Protocol
<b>Last Edited</b> 11/03/2013	<b>Condition category</b> Infections and Infestations	<input type="checkbox"/> Statistical analysis plan
		<input checked="" type="checkbox"/> Results
		<input type="checkbox"/> Individual participant data

## Plain English Summary

Not provided at time of registration

## Contact information

### Type(s)

Scientific

### Contact name

Dr Catherine Thwaites

### Contact details

Oxford University Clinical Research Unit  
Hospital for Tropical Diseases  
190 Ben Ham Tu  
Ho Chi Minh City  
Viet Nam  
Q5

## Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

066689/z

## Study information

Scientific Title

**Acronym**

Magnesium in Tetanus

**Study hypothesis**

Magnesium sulphate is better than conventional treatment in controlling spasms and autonomic instability in the management of severe tetanus.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

OXTREC (Oxford University Tropical Research Ethical Committee) approval gained for study in March 2002 (reference number: 003-02) and Hospital for Tropical Diseases Scientific and Ethical Committee, Ho Chi Minh City, Viet Nam, approved of study in March 2002.

**Study design**

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****Condition**

Tetanus

**Interventions**

Group one - intervention group: Magnesium Sulphate intravenous (iv) infusion 0.5 - 2 g/hr.  
Group two - control group: Conventional treatment of intravenous diazepam (bolus 5 - 10 mg) or midazolam (infusion 1 - 10 mg/hr), but if spasms were not controlled intravenous infusions of pipercuronium were given. Autonomic disturbance was treated with verapamil, morphine or digoxin.

**Intervention Type**

Drug

**Phase**

Not Specified

**Drug/device/biological/vaccine name(s)**

Magnesium sulphate, diazepam and midazolam

### **Primary outcome measure**

Requirement for mechanical ventilation primary outcome

### **Secondary outcome measures**

1. Requirement for benzodiazepines, pipecuronium, morphine and verapamil (mg/kg)
2. Hourly Systolic Blood Pressure (SBP) and Heart Rate (HR) recording and mean seven day maximum SBP, HR and daily variation in SBP
3. In hospital mortality (including patients taken home to die)
4. Length of Intensive Care Unit (ICU) stay, total hospital stay and total cost of hospital stay
5. Requirement for ventilation during hospital stay
6. Daily 8 am serum Creatinine Kinase (CK) measurement
7. Urinary epinephrine and norepinephrine, measured from a 24 hour collection on day two of the study

### **Overall study start date**

01/05/2002

### **Overall study end date**

01/05/2005

## **Eligibility**

### **Participant inclusion criteria**

1. Adults with Ablett classification of tetanus severity grade three or four
2. Patient over 15 years with diagnosed tetanus
3. Tracheostomy more than six hours and not yet ventilated

### **Participant type(s)**

Patient

### **Age group**

Adult

### **Sex**

Both

### **Target number of participants**

180

### **Participant exclusion criteria**

1. Urine output less than 1 ml/kg/hr
2. Electrocardiogram (ECG) evidence of conduction abnormalities/ischaemia
3. Serum creatinine more than 1.5 mg%

### **Recruitment start date**

01/05/2002

### **Recruitment end date**

01/05/2005

## Locations

### Countries of recruitment

Viet Nam

### Study participating centre

Oxford University Clinical Research Unit

Ho Chi Minh City

Viet Nam

Q5

## Sponsor information

### Organisation

University of Oxford (UK)

### Sponsor details

University Offices

Wellington Square

Oxford

England

United Kingdom

OX1 2JD

### Sponsor type

University/education

### Website

<http://www.ox.ac.uk/>

### ROR

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

## Funder(s)

### Funder type

Charity

### Funder Name

The Wellcome Trust (UK) (grant ref: 066689)

# 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	21/10/2006		Yes	No