Treatment of Complex Regional Pain Syndrome type 1: a randomised, double-blind, placebo-controlled study with S(+)-ketamine

Submission date	Recruitment status No longer recruiting	Prospectively registered		
09/01/2006		☐ Protocol		
Registration date	Overall study status	Statistical analysis plan		
09/01/2006	Completed	[X] Results		
Last Edited	Condition category	[] Individual participant data		
18/08/2009	Musculoskeletal Diseases			

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

Dr M.J. Sigtermans

Contact details

Leiden University Medical Center Department of Anaesthesiology P.O. Box 9600 Leiden Netherlands 2300 RC +31 (0)71 5262301 m.j.sigtermans@lumc.nl

Additional identifiers

Protocol serial number

NTR507; LUMC P05.100; Min. of Econ. Aff., BSIK03016

Study information

Scientific Title

Study objectives

S(+)-ketamine reduces pain in patients with Complex Regional Pain Syndrome type 1 having symptoms shorter than 6 months and longer than 3 years.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Received from local medical ethics committee

Study design

Randomised double blind placebo controlled parallel group trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Complex regional pain syndrome type 1 (CRPS I)

Interventions

Subjects are assigned to receive either intravenous (S+)-ketamine or placebo.

Intervention Type

Other

Phase

Not Specified

Primary outcome(s)

Pain reduction measured by numerical rating scale (0 no pain, 10 worst imaginable pain).

Key secondary outcome(s))

Secondary aims of the study deal with:

- 1. The role of NMDA receptor activation in the autonomic and motor features of CRPS
- 2. To establish the endurance of ketamine on the impairments of CRPS
- 3. To study the pharmacokinetics and pharmacodynamics of ketamine in subanaesthetic doses
- 4. To establish data for future pragmatic studies on ketamine iv in patients with CRPS on the levels of disability and safety

Completion date

01/12/2007

Eligibility

Key inclusion criteria

Patients will be male or female adult patients with a clinical diagnosis of CRPS 1 who are referred to the pain centre outpatients' clinic of the department of Anaesthesiology at the LUMC.

- 1. Patients should fulfill the diagnostic criteria of the consensus report of CRPS 1:
- 1.1. Continuing pain, allodynia or hyperalgesia, in which the pain is disproportionate to any inciting event
- 1.2. Evidence at some time of edema, changes in skin blood flow or abnormal sudomotor activity in the region of the pain
- 1.3. No condition that would otherwise account for the degree of pain and dysfunction
- 2. Patients must report a VAS-spontaneous pain score of 5 cm or higher
- 3. Patient's age is between 18 and 70 years
- 4. Onset of symptoms must be shorter than 6 months or longer than 3 years before inclusion
- 5. Patients should give a written informed consent

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

Αll

Key exclusion criteria

- 1. Patients who are not able to give informed consent
- 2. Patients suffering from other pain syndromes, interfering with pain ratings
- 3. Patients suffering from other syndromes interfering with pain ratings
- 4. Patients suffering from a kidney and/or severe liver disease
- 5. Patients suffering from nerve damage in the affected area
- 6. Patients with an active infection
- 7. Patients with high intracranial pressure
- 8. Patients with epilepsy
- 9. Patients with a psychiatric illness
- 10. Patients with thyroid disease
- 11. Patients with cancer
- 12. Patients with cardiac disease
- 13. Patients with pulmonary disease
- 14. Patients with glaucoma
- 15. Patients with a history of cerebral vascular accident (CVA)
- 16. Patients who are a pregnant
- 17. Strong-opioid consumption (step one and two of the WHO pain ladder is allowed)

Date of first enrolment

01/12/2005

Date of final enrolment

01/12/2007

Locations

Countries of recruitment

Netherlands

Study participating centre
Leiden University Medical Center
Leiden
Netherlands
2300 RC

Sponsor information

Organisation

Leiden University Medical Centre (Netherlands)

ROR

https://ror.org/027bh9e22

Funder(s)

Funder type

Government

Funder Name

Ministry of Economic Affairs (Netherlands)

Alternative Name(s)

Ministry of Economic Affairs, Netherlands Ministry of Economic Affairs, EZ

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

Netherlands

Results and Publications

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	01/10/2009		Yes	No