

Preventive antibacterial short-term therapy in patients with acute ischemic infarction in the territory of the middle cerebral artery (MCA)

Submission date 08/06/2004	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 13/07/2004	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
Last Edited 19/05/2008	Condition category Circulatory System	<input type="checkbox"/> Individual participant data

Plain English summary of protocol

Not provided at time of registration

Study website

<http://www.charite.de/ch/neuro/forschung/teams/experimentell/pantheris.htm>

Contact information

Type(s)

Scientific

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

N/A

Study information

Scientific Title

Acronym

PANTHERIS

Study objectives

Strokes are frequently accompanied by severe bacterial infections (21 - 65% among unselected patients), 10 - 22% of which were pneumonias. Complicating infections constitute a leading cause of stroke mortality. We have been able to demonstrate in an animal model that a profound stroke related immunodepression contributes to the rise of complicating infections, and that these infections can effectively be avoided by preventive antibacterial therapy (PAT) with Moxifloxacin. Importantly, in this stroke model PAT not only prevents infections, it also improves survival and outcome, significantly.

The following primary hypothesis shall be tested:

1. PAT with Moxifloxacin reduces the incidence of complicating infections after (primary aim)

Secondary aims:

2. PAT also reduces the infarct volume and improves the neurological outcome
3. Stroke causes an immunodepression, which is mediated by the sympathetic nerve system
4. PAT does not lead to a development of resistency among facultatively pathogenous bacteriae

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approved by the ethics committee of Charité Hospital on the 23rd September 2002.

Study design

Double blind, randomised and controlled study

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Hospital

Study type(s)

Prevention

Participant information sheet

Health condition(s) or problem(s) studied

Stroke

Interventions

Patients of group A are being treated according to the current standards of therapy. With respect to antibiotics, they are fully and effectively treated as soon as an antibiotic medication is indicated i.e. as soon as an infection is diagnosed. For reasons of the double blind study design, during the first five days after stroke, these patients receive a placebo (Riboflavin) instead of a preventive antibacterial medication.

Patients of group B are being treated according to the new regimen under investigation with a preventive antibacterial medication (Moxifloxacin 400 mg intravenous [iv]) for five days. Patients with outbreak of an intercurrent infection, were treated according to standardised protocol (SOP). The study medication will be continued.

This design enables us to work with a placebo control and yet have all patients with infections properly treated according to the current medical standards. Thus, the use of a placebo control in this study does not imply that some patients receive an ineffective medication for a diagnosed condition. It means that the new therapeutic regimen of preventive treatment is being tested against the current standard of post hoc treatment.

Intervention Type

Drug

Phase

Not Specified

Drug/device/biological/vaccine name(s)

Moxifloxacin

Primary outcome measure

Not provided at time of registration

Secondary outcome measures

Not provided at time of registration

Overall study start date

01/06/2003

Completion date

30/06/2008

Eligibility

Key inclusion criteria

The double blind, randomised and controlled study will be carried out on two groups of about 40 patients each. Since patients with large infarctions in the territory of the middle cerebral artery and a subsequent severe neurological deficit (National Institutes of Health-Stroke-Scale [NIHSS]

greater than 11) have the highest risk of pneumonia, we include only this subpopulation of stroke patients in our study.

Inclusion criteria:

1. Severe ischemic strokes in MCA territory (area greater than 50% in cerebral computed tomography [CCT], NIHSS greater than 11)
2. Within 36 hours after stroke onset
3. Older than 18 years
4. No infection
5. No intracerebral bleeding

Participant type(s)

Patient

Age group

Adult

Lower age limit

18 Years

Sex

Both

Target number of participants

80

Key exclusion criteria

1. Immunosuppressive therapy
2. Pregnancy
3. Antibacterial therapy within the last 24 hours before inclusion
4. Contraindication for moxifloxacin

Date of first enrolment

01/06/2003

Date of final enrolment

30/06/2008

Locations

Countries of recruitment

Germany

Study participating centre

Klinik für Neurologie

Berlin

Germany

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Sponsor information

Organisation

Charité - University Medicine Berlin (Charité - Universitätsmedizin Berlin) (Germany)

Sponsor details

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Sponsor type

University/education

Website

<http://www.charite.de/>

ROR

<https://ror.org/001w7jn25>

Funder(s)

Funder type

University/education

Funder Name

Charité - University Medicine Berlin (Charité - Universitätsmedizin Berlin) (Germany)

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	14/05/2008		Yes	No