

The effect of paracetamol (acetaminophen) and ibuprofen on body temperature in acute stroke: a phase II double-blind randomised placebo-controlled trial

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| Submission date 15/02/2002 | Recruitment status No longer recruiting | <input type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol |
| Registration date 15/02/2002 | Overall study status Completed | <input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results |
| Last Edited 06/09/2007 | Condition category Circulatory System | <input type="checkbox"/> Individual participant data |

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

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Additional identifiers

Study information

Scientific Title

Acronym

PISA

Study objectives

To study the effect of high-dose ibuprofen and to confirm the previously observed reducing effect of high-dose paracetamol on body temperature, and to study their safety in normothermic and subfebrile patients with acute ischaemic stroke.

Ethics approval required

Old ethics approval format

Ethics approval(s)

The medical ethics committees of the three hospitals have approved this protocol.

Study design

Randomised controlled trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Stroke

Interventions

1. Paracetamol 6 g daily, for 5 days
2. Ibuprofen 2.4 g daily, for 5 days
3. Placebo for 5 days

Intervention Type

Drug

Phase

Phase II

Drug/device/biological/vaccine name(s)

Paracetamol (acetaminophen), ibuprofen

Primary outcome(s)

Body temperature at 24 hours from start of treatment.

Key secondary outcome(s)

1. Change in baseline temperature at 1 and 5 days from start of treatment
2. Time with elevated body temperature (greater than 37.0°C) (area under the curve) during the first 24 hours and the first five days

Tertiary outcomes:

Functional outcome at one month, as determined by the scores on the modified Rankin Scale (mRS) and Barthel Index (BI).

Completion date

31/12/2001

Eligibility

Key inclusion criteria

1. An acute ischaemic anterior circulation stroke
2. A body temperature greater than 36.0°C or less than 39.0°C
3. A CT scan that is compatible with acute ischaemic stroke
4. A focal deficit without rapid improvement
5. A possibility to start treatment within 24 hours after stroke onset

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Not Specified

Sex

Not Specified

Key exclusion criteria

1. Severe aphasia, defined as an aphasia score of 2 or 3 on the National Institutes of Health Stroke Scale (NIHSS)
2. Treatment with a non-Steroidal Anti-Inflammatory Drug (NSAID) deemed necessary
3. Hypersensitivity to ibuprofen or paracetamol
4. (Chronic) liver failure or cirrhosis
5. (Chronic) renal failure
6. History of alcohol abuse
7. Active gastric ulcer disease or a history of peptic ulceration or gastro-intestinal haemorrhage in the preceding year
8. Colitis ulcerosa
9. Pregnancy
10. Use of corticosteroids
11. A severe concomitant medical condition that could affect the assessment of the effect of the study medication on temperature
12. Residual neurological impairment resulting from a previous stroke that may hamper the assessment of functional outcome
13. Death appearing imminent
14. No informed consent given

Date of first enrolment

01/12/2000

Date of final enrolment

31/12/2001

Locations

Countries of recruitment

Netherlands

Study participating centre

Dept of Neurology

Rotterdam

Netherlands

3000 CR

Sponsor information

Organisation

Erasmus Medical Center (The Netherlands)

ROR

<https://ror.org/018906e22>

Funder(s)

Funder type

Research organisation

Funder Name

Rotterdam Neurovascular Research Foundation (Stichting Neurovasculair Onderzoek Rotterdam) (The 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 | 06/02/2003 | | Yes | No |
| Protocol article | Protocol | 27/03/2002 | | Yes | No |