

# Pharmacokinetics of haloperidol

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Search for a relation between the concentration of haloperidol in serum and in liquor in elderly who reached a steady state of haloperidol. Secundairy aim: Cal inter-individual variation in serum and CSF concentrations, at the same dose haloperidol...

<b>Ethical review</b>	Approved WMO
<b>Status</b>	Recruitment stopped
<b>Health condition type</b>	Other condition
<b>Study type</b>	Observational invasive

## Summary

### ID

NL-OMON39461

### Source

ToetsingOnline

### Brief title

Pharmacokinetics of haloperidol

### Condition

- Other condition
- Movement disorders (incl parkinsonism)

### Synonym

pharmacokinetics

### Health condition

farmacokinetiek van een geneesmiddel/antipsychoticum

### Research involving

Human

### Sponsors and support

**Primary sponsor:** Jeroen Bosch Ziekenhuis

**Source(s) of monetary or material Support:** Ministerie van OC&W

## Intervention

**Keyword:** Cerebrospinal fluid, Haloperidol, Pharmacokinetics

## Outcome measures

### Primary outcome

concentration haloperidol in serum and liquor

Farmacogenetic polymorfisms of the cytochrome P450 enzyme CYP2D6

### Secondary outcome

age, gender, race, smoking, medication use

## Study description

### Background summary

Haloperidol is the first choice antipsychotic drug for the treatment of delirium or behavioural problems in dementia. In elderly there is a large variability in effects and side-effects of haloperidol. There is no previous research which describes the relation between plasma haloperidol concentration and liquor haloperidol concentration. Pharmacogenetic variation in polymorphisms of the cytochrome P450 enzyme CYP2D6 is a possible explanation for the inter individual variation in blood levels of haloperidol at the same dose.

### Study objective

Search for a relation between the concentration of haloperidol in serum and in liquor in elderly who reached a steady state of haloperidol. Secondary aim: Can inter-individual variation in serum and CSF concentrations, at the same dose haloperidol, be explained by polymorphisms in CYP2D6 alleles?

### Study design

Cross sectional study design

### Study burden and risks

The attending physician treats the patients with regular care. To take an extra tube cerebrospinal fluid with the spinal anaesthesia gives a slightly elevated

risk of post dural puncture headache.

The incidence of post dural puncture headache is 5-15%. It is caused by excessive loss of cerebrospinal fluid. When a patient sits or stands straight, the pressure in the head is lower what can cause a headache. Leakage of cerebrospinal fluid and the headache are not dangerous.

Taking a tube blood gives a risk of a hematoma.

No oral haloperidol on the morning of the surgery does not matter, because after five days of haloperidol a steady state is reached.

## Contacts

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### Scientific

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## Trial sites

### Listed location countries

Netherlands

## Eligibility criteria

### Age

Adults (18-64 years)

Elderly (65 years and older)

### Inclusion criteria

age >64 years

elective operation with spinal anesthesia

elevated risk to develop a delirium and prescription of haloperidol during five days pre-operative in a dose of 1mg/dag as regular care  
mentally competent  
informed consent

## Exclusion criteria

none

## Study design

### Design

**Study type:** Observational invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Treatment

### Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 30-01-2012

Enrollment: 20

Type: Actual

## Ethics review

Approved WMO

Date: 12-01-2012

Application type: First submission

Review commission: METC Brabant (Tilburg)

Approved WMO

Date: 15-02-2012

Application type: Amendment

Review commission: METC Brabant (Tilburg)

Approved WMO  
Date: 06-03-2013  
Application type: Amendment  
Review commission: METC Brabant (Tilburg)

## Study registrations

### Followed up by the following (possibly more current) registration

No registrations found.

### Other (possibly less up-to-date) registrations in this register

No registrations found.

### In other registers

Register	ID
CCMO	NL35631.028.11