Postoperative cognitive function in young adults

Published: 05-09-2006
Last updated: 14-05-2024

The main objective of this study is to identify the incidence of POCD in adult patients under 50 years of age, who undergo major surgery

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Cognitive and attention disorders and disturbances
Study type	Observational non invasive

Summary

ID

NL-OMON30141

Source
ToetsingOnline

Brief title
Postoperative cognitive function in young adults

Condition

- Cognitive and attention disorders and disturbances
- Therapeutic procedures and supportive care NEC

Synonym
Cognitive decline, memory and concentration disorder

Research involving
Human

Sponsors and support

Primary sponsor: Universitair Medisch Centrum Utrecht
Source(s) of monetary or material Support: Ministerie van OC&W

Intervention

Keyword: Anesthesia, POCD, Surgery, Young adults

Outcome measures

Primary outcome

The incidence of postoperative cognitive decline (POCD) at 4 weeks after surgery.

Secondary outcome

- The incidence of POCD on the day of discharge.

- The relation between POCD and baseline characteristics (e.g. age, educational level, diabetes, hypertension, use of medication).

- A comparison of the incidence of POCD in the patients undergoing general or regional anaesthesia.

Study description

Background summary

In the past 10-15 years, multiple studies have shown that postoperative cognitive decline (POCD) is evident in elderly patients (>60 years). Following cardiac surgery, cognitive dysfunction is a clinically relevant health hazard that occurs in up to 30% of patients. The incidence of POCD after non-cardiac surgery is slightly lower, but it still occurs in a considerable percentage of this rather large group of patients.
Although several studies indicate that in the longer term most patients fully recover from POCD, cognitive decline in the early postoperative period can have a considerable effect on patient quality of life, with increased health service demands. Also, in terms of economics, delayed return to employment is an important *side-effect* of (even short lasting) POCD, which is particularly an issue in younger patients.
Until date, however, very little is known about the incidence of POCD in younger patients (<40 years old). In this study, we will therefore investigate the incidence of postoperative cognitive decline in patients aged 18-50 years.

Study objective

The main objective of this study is to identify the incidence of POCD in adult patients under 50 years of age, who undergo major surgery

Study design

This study is designed as an observational cohort study. Cognitive performance of eligible patients will be compared before and after the operation. To control for learning effects and natural fluctuations in testing performance, the patients* test results will be compared to results of a group of healthy control subjects, who will be matched for age and educational level.

Study burden and risks

The patient burden for this study consists of 3 computerized cognitive tests. The first one will be during the preoperatieve screening visit; the other two at discharge and 4 weeks after the procedure, respectively. Per test, around 15 minutes are required.

Contacts

Public
Universitair Medisch Centrum Utrecht

Heidelberglaan 100
3584 CX Utrecht
Nederland
Scientific
Universitair Medisch Centrum Utrecht

Heidelberglaan 100
3584 CX Utrecht
Nederland

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)
Elderly (65 years and older)

Inclusion criteria

patient is 18- 50 years old
patient is undergoing elective major surgery
patient is living in the city of Utrecht

Exclusion criteria

patient is younger than 18 years or older than 50 years
patient is undergoing cardiac surgery
patient is undergoing neurosurgery
patient is undergoing emotional encumbering procedure
patient is suffering from a psychiatric disorder

Study design

Design

Study type:	Observational non invasive
Intervention model:	Other
Allocation:	Non-randomized controlled trial
Masking:	Open (masking not used)
Control:	Active
Primary purpose:	Basic science

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	06-09-2006
Enrollment:	88

Type:	Actual

Ethics review

Approved WMO Date:	05-09-2006
Application type:	First submission
Review commission:	METC Universitair Medisch Centrum Utrecht (Utrecht)

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	NL12062.041.06