

# Patient controlled analgesia i.v. with morphine versus continuous epidural analgesia with bupivacaine and sufentanil as pain relief after caesarean section.

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We would like to research whether there is a difference in time of mobilization between women getting iv PCA with Morphine (PCA) as opposed to women getting continuous epidural analgesia (CEA) with bupivacaine and sufentanil. We expect that the PCA will...

<b>Ethical review</b>	Approved WMO
<b>Status</b>	Recruitment stopped
<b>Health condition type</b>	Postpartum and puerperal disorders
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON44865

### Source

ToetsingOnline

### Brief title

GAstudy

### Condition

- Postpartum and puerperal disorders
- Obstetric and gynaecological therapeutic procedures

### Synonym

pain relief after caesarean section

### Research involving

Human

## Sponsors and support

**Primary sponsor:** Kennemer Gasthuis

**Source(s) of monetary or material Support:** geen

## Intervention

**Keyword:** caesarean section, epidural, pain relief, PCA

## Outcome measures

### Primary outcome

Mobilization, how many hours after cesarean section does the patient stand beside the bed?

VAS pain score post partum.

### Secondary outcome

Time between caesarean section and stop PCA or CEA in hours.

Time between caesarean section and discharge in hours.

Use of oral pain relief.

Side effects: nausea and vomiting, sedation score, pruritis.

## Study description

### Background summary

The last decennia the number of caesarean sections has risen considerably. In the Eighties around 10% of the deliveries ended in a caesarean section. Nowadays an average of 15-20% caesarean sections is the norm. In Holland we have a rapid turnover, as women with a normal uncomplicated vaginal delivery are discharged within hours after child birth. After a caesarean section women are allowed to stay 72 hours in the hospital

Good pain relief is important after a caesarean section to give the mother a chance to bond with her child. By being able to mobilize, she can take care of her baby herself. By achieving an early discharge, she can go home and take over control completely. She will also have a home help the first week. Good painrelief also shouldn't make mothers sleepy or drowsy, so they could miss

valuable first impressions. Last but not least the hospital would benefit from an earlier discharge, because of the high turnover in the labour wards. In the Netherlands having 180.000 deliveries per annum, it would with the current section rate concern 36.000 post natal cares.

Discharge shouldn't be hindered by controllable factors as pain.

## **Study objective**

We would like to research whether there is a difference in time of mobilization between women getting iv PCA with Morphine (PCA) as opposed to women getting continuous epidural analgesia (CEA) with bupivacaine and sufentanil.

We expect that the PCA will be as effective as CEA, but that women will mobilize earlier and therefore be able to look after their child sooner. We will perform the research within our own hospital.

## **Study design**

The proposed study is a randomized study on location with control group. The Kennemer Gasthuis has a minimum of 1500 high risk deliveries per annum. The caesarean section percentage is around 20 %. The amount of elective caesarean sections was 173 in 2012.

The research population will be asked to participate in the research at 34 weeks pregnancy at the clinic.

Group A will get PCA iv with morphine 2mg/ml, bolus 2 mg, lock out period 5 minutes, maximum 30 mg in 4 hours. Group B will get continuous epidural analgesia (CEA) with bupivacaine 0,125% (50 ml) combined with sufentanil 50 micrograms = 1 ml, infusion rate 4-10 ml/hr., starting with 6 ml/hr or higher.

## **Intervention**

Group A will get iv PCA with morphine 2mg/ml, bolus 2 mg, lock out period 5 minutes, with a maximum of 30 mg in 4 hours.

Group B will get continuous epidural analgesia (CEA) with bupivacaine 0,125% (50 ml) combined with sufentanil 50 micrograms = 1 ml, infusion rate 4-10 ml/hr, starting with 6 ml/hr or higher.

## **Study burden and risks**

Minimal, restricted to only a few questions at randomisation and during admission in hospital.

Both methods of pain relief are standard for post-operative pain relief in our hospital and in the Netherlands.

## Contacts

### Public

Kennemer Gasthuis

Boerhaavelaan 22  
Haarlem 2035RC  
NL

### Scientific

Kennemer Gasthuis

Boerhaavelaan 22  
Haarlem 2035RC  
NL

## Trial sites

### Listed location countries

Netherlands

## Eligibility criteria

### Age

Adults (18-64 years)

Elderly (65 years and older)

### Inclusion criteria

ASA1 and ASA2 pregnant women scheduled for primary caesarean section

### Exclusion criteria

no informed consent

pre-eclampsia

coagulation disorders

ASA 3 and more

allergy for morphine, sufentanil or bupivacaine

local infection on the site of injection of the epidural.

increased intracranial pressure.

uncorrected hypovolemia.  
relative contra-indications for epidural such as:  
neurological disorders like multiple sclerosis,  
malformation of the back,  
history of back operations,  
systemic infections.

## Study design

### Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)
Control:	Active
Primary purpose:	Health services research

### Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	20-01-2015
Enrollment:	70
Type:	Actual

### Medical products/devices used

Registration:	No
Product type:	Medicine
Brand name:	Morphine
Generic name:	Morphine
Registration:	Yes - NL intended use

## Ethics review

Approved WMO

Date:	08-08-2014
Application type:	First submission
Review commission:	METC Amsterdam UMC
Approved WMO	
Date:	23-02-2016
Application type:	Amendment
Review commission:	METC Amsterdam UMC
Approved WMO	
Date:	05-04-2018
Application type:	Amendment
Review commission:	METC Amsterdam UMC

## 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
EudraCT	EUCTR2013-00-5168-2-NL
CCMO	NL45365.094.13

## Study results