Epidemiology of Postoperative Pain

No registrations found.

Ethical review	Not applicable
Status	Recruiting
Health condition type	-
Study type	Observational non invasive

Summary

ID

NL-OMON20021

Source
Nationaal Trial Register

Health condition

Postoperative Pain
Pain Management
Anaesthesia
Surgery

Sponsors and support

Primary sponsor: OLVG Hospital
Oosterpark 9
1091 AC Amsterdam
The Netherlands
Attention: prof. dr. M.A.A.J. van den Bosch
Source(s) of monetary or material Support: Departmental funding

Intervention

Outcome measures

Primary outcome

1) Epidemiology of postoperative pain

To establish the epidemiology of postoperative pain versus surgical procedures and type of

analgesia; pain scores vs. different procedures, location surgery, patient characteristics and combinations of aforementioned. To be able to identify procedures and patients with a high risk of severe postoperative pain and to be able tot identify surgical indicator procedures that can be used as a correction model for differences in surgical case mix between hospitals.

2) Risk and prediction

To Identify patient- and surgical procedure characteristics correlating with severe postoperative pain

3) Best practice advice

Drafting a best practice advise for procedure specific postoperative pain treatment.

Secondary outcome

1) Epidemiology of Postoperative Pain

To provide a ranking of surgical procedures in relationship to severe postoperative pain and administered analgesics.

To identify indicator surgical procedures with high risk of postoperative pain

To determine the quality and quantity of VAS and NRS registration for post operative pain intensity measurement

2) Risk and Prediction

To design a model predicting postoperative and form the basis of a decision support application customizing pain treatment for specific groups of patients and to the individual patient’s needs.

3) Best practice advice

Build an algorithm advising for the best (procedure specific) post operative pain treatment build in the PDMS or an independent application to tailor pain treatment to the patients needs and facilitate early intervention.

Study description

Background summary

Introduction:

Pain intensity registration after surgery remains a major challenge due to poor compliance and outdated unidimensional assessment using VAS or NRS. No study has yet explored the epidemiology and quality of pain registration following many types of surgery in everyday day clinical practice amongst different Dutch general and academic hospitals. We want to conduct a retrospective observational study using patient data from 5 different hospitals with OLVG as primairy centre. The goal is to improve postoperative pain management, predict severe postoperative pain and develop procedure specific, optimized pain-treatment protocols with automated reminders and decision support build in PDMS. Futhermore to identify standardized surgical indicator procedures that can be used as a correction model for differences in surgical case mix between hospitals.

Objectives:

1) Epidemiology of postoperative pain

Primary Objective: To establish the epidemiology of postoperative pain versus surgical procedures and type of analgesia; pain scores vs. different procedures, location surgery, patient characteristics and combinations of aforementioned. To be able to identify procedures and patients with a high risk of severe postoperative pain and to be able to identify surgical indicator procedures that can be used as a correction model for differences in surgical case mix between hospitals.

Secondary Objective: To provide a ranking of surgical procedures in relationship to severe postoperative pain, administered analgesics and locoregional techniques.

Secondary objective: To identify indicator surgical procedures with high risk of postoperative pain

Secondary objective: To determine the quality and quantity of VAS and NRS registration for post operative pain intensity measurement

2) Risk and prediction

Primary Objective: To Identify patient- and surgical procedure characteristics correlating with severe postoperative pain

Secondary Objective: To design a model predicting postoperative and form the basis of a decision support application customizing pain treatment for specific groups of patients and to the individual patient’s needs.

3) Best practice advice

Primary Objective: Drafting a best practice advise for procedure specific postoperative pain treatment.

Secondary Objective: build an algorithm advising for the best (procedure specific) post operative pain treatment build in the PDMS or an independent application to tailor pain treatment to the patients needs and facilitate early intervention.

Study Population:

All adult non-cardiac non-day care surgical patients who had surgery between October 1st 2015 and April 1st 2017 in OLVG, AMC, UMCU, WFG and LUMC. We estimate that between 80,000 and 120,000 patient files will be eligible for data analysis.

Inclusion: patients aged 18y or older, elective non day care surgery and surgical emergency procedures with an admission of at least 24hr

Exclusion: Day care surgery, palliative surgery, re-do surgical procedures, repeated surgery within the same hospital stay or 72 hours after the first surgery. Sequential surgeries during the same stay, rare surgical procedures performed less than 5 times a year.

Methods:

Research data will be collected by querying the patient data management system of each hospital for the period between October 1st 2015 and April 1st 2017– by an information specialist. Information on pain management protocols will be obtained by checking site specific protocol data warehouse.

Data analysis will be carried out in 3 phases. Phase 1: evaluating the epidemiology of postoperative pain. Phase 2: identifying risk factors for severe postoperative pain and building a prediction model. Phase 3: comparing pain intensity scores in relation tot administered analgesic and pain protocols amongst the participating hospitals for a best practice recommendation.

Study objective

1) Epidemiology of postoperative pain

What is the correlation between pain intensity scores and type of surgical procedure in relation to patient characteristics and analgesia? Is it possible to specify surgical procedures indicating its pain intensity ranking from severe to no pain using pain intensity data from PDMS up to 72 hr in relationship with the type of postoperative analgesia technique and variation in surgical case mix amongst the cooperating hospitals?

2) Risk and prediction

Which patient characteristics and surgical procedures are predictors for severe postoperative pain? Is it possible to develop a postoperative pain prediction rule?

3) Best practice advice

Is it possible to compose a best practice advice for (procedure specific) treatment of post operative pain based on the epidemiology of postoperative pain in relation to postoperative analgesia technique using data from different hospitals?

Study design

Start study: October 1st 2017

End study: March 1st 2018

Intervention

not applicable

Contacts

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Eligibility criteria

Inclusion criteria

Patients aged 18y or older, elective non day care surgery and surgical emergency procedures with an admission of at least 24hr

Exclusion criteria

Day care surgery, palliative surgery, , repeated surgery within the same hospital stay or 72 hours after the first surgery. rare surgical procedures performed less than 5 times a year.

Study design

Design

Study type: Observational non invasive

Intervention model:	Other
Masking:	Open (masking not used)
Control:	N/A , unknown

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	01-10-2015
Enrollment:	120000
Type:	Anticipated

Ethics review

Not applicable

Application type:	Not applicable

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
NTR-new	NL7030
NTR-old	NTR7235
Other	OLVG : WO17.051

Study results