The efficacy of fluid expansion on hypotension and cardiac output measured using Nexfin during day case surgery in patients under general anesthesia.

No registrations found.

Ethical review	Positive opinion
Status	Recruiting
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON28195

Source
NTR

Brief title
N/A

Health condition

Cardiac output
Nexfin
General anesthesia
Day case sugery
Fluid expansion

Sponsors and support

Primary sponsor: Radboud University Nijmegen Medical Centre
Source(s) of monetary or material Support: Radboud University Nijmegen Medical Centre

Intervention

Outcome measures

Primary outcome

Cardiac output before and after fluid expansion.

Secondary outcome

1. Blood pressure before and after fluid expansion;

2. Use of vasoactive medication.

Study description

Background summary

Fluid expansion is considered the primary intervention in case of hypotension during general anesthesia. The aim of this study is to determine the efficacy of fluid expansion in the treatment of hyotension during day case surgery in patients under general anesthesia without significant blood loss. Fluid expansion of 6 ml/kg ideal weight is administered in case of hypotension, defined as systolic blood pressure < 90 mHg or a decrease in mean arterial pressure of > 25%. The effect of fluid expansion on cardiac output and blood pressure is measured using Nexfin, a non-invasive continuous cardiac output monitor.

Study objective

Perioperative fluid expansion as primairy treatment of hypotension in day case surgery leads to a modest increase of cardiac output.

Study design

T0= Before start of fluid expansion;

T1= 5 minutes after completion of fluid expansion;

T2= 20 minutes after fluid expansion;

T3=30 minutes after fluid expansion.

Intervention

Fluid expansion of 6 ml/kg ideal weight in case of hypotension, defined as systolic blood pressure < 90 mHg or a decrease in mean arterial pressure of > 25%.

Contacts

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Eligibility criteria

Inclusion criteria

1. Patients under general anesthesia in minor day case sugery;

2. ASA classification I and II.

Exclusion criteria

1. Age < 18 years;

2. Duration of surgery > 240 minutes;

3. Digital ischaemia;

4. Preexisting cardiac arrhythmias;

5. Expected blood loss > 300 ml

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Non controlled trial
Masking:	Single blinded (masking used)
Control:	N/A , unknown

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	01-10-2012
Enrollment:	75
Type:	Anticipated

Ethics review

Positive opinion

Date:	24-10-2012
Application type:	First submission

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	NL3500
NTR-old	NTR3677
Other	CMO Regio Arnhem-Nijmegen : 2012/353
ISRCTN	ISRCTN wordt niet meer aangevraagd.

Study results

Summary results
N/A