Effect of thoracic epidural anesthesia (TEA) on right ventricular function and ventricular-pulmonary coupling.

No registrations found.

Ethical review	Positive opinion
Status	Recruitment stopped
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON21044

Source
NTR

Health condition

TEA-RV function- ventricular pulmonary coupling

Sponsors and support

Primary sponsor: Leiden University Medical Center (LUMC)
Source(s) of monetary or material Support: Dep Anesthesiology LUMC

Intervention

Outcome measures

Primary outcome

Pressure–volume signals acquired during steady state yield end-diastolic and end-systolic volume (EDV, ESV), ejection fraction (EF), end-diastolic and end-systolic pressure (EDP, ESP), stroke work (SW), dP/dtMAX and dP/dtMIN, and isovolumic relaxation time constant Tau. The end-systolic pressure–volume relation (ESPVR: ESP vs. ESV) and the preload recruitable stroke work relation (PRSWR: SW vs. EDV) quantify systolic ventricular function. The slope of the ESPVR determines end-systolic elastance Ees. The end-diastolic pressure-volume relation

(EDPVR: EDP vs. EDV) is used to determine diastolic function, quantified by diastolic chamber stiffness and the stiffness constant.
Right ventricular afterload is determined by effective arterial elastance Ea, calculated as ESP/SV. Ventricular-arterial coupling is quantified as Ees/Ea.

Secondary outcome

ECG, Heart rate (beats/min), NIBP (mmHg), SpO2 (%), Systolic Blood Pressure (mmHg), Diastolic Blood Pressure (mmHg), Mean Arterial Pressure (mmHg), Cardiac Output (l/min).

Study description

Background summary

N/A

Study objective

N/A

Study design

Before and after Thoracic epidural anesthesia.

Intervention

Right ventricular function will be assessed by invasive pressure-volume loop analysis using combined pressure-conductance catheters. The response of right ventricular function to increased afterload, induced by brief, partial clamping of the pulmonary artery, will be tested before and after induction of TEA.

Contacts

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Eligibility criteria

Inclusion criteria

Patients undergoing lungresection.

Exclusion criteria

Contra indication epidural anesthesia.

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Non controlled trial

Control: N/A , unknown

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	01-05-2011
Enrollment:	10
Type:	Actual

Ethics review

Positive opinion

Date:	29-03-2011
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	NL2706
NTR-old	NTR2844
Other	METC LUMC : P10.225
ISRCTN	ISRCTN wordt niet meer aangevraagd.

Study results

Summary results
N/A