The effect of Continuous Positive Airway Pressure (CPAP) on the collapsed lung during single-lung-ventilation in patients undergoing robot-assisted thoracoscopic esophageal reseection: pulmonary complications, local and systemic cytokine production.

No registrations found.

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

Summary

ID

NL-OMON21972

Source
NTR

Brief title
COCTAIL

Health condition

Esophageal cancer

Sponsors and support

Primary sponsor: University Medical Center Utrecht (UMCU), Department of Surgery
Source(s) of monetary or material Support: Comprehensive Cancer Centre (Integraal Kanker Centrum Midden Nederland)

Intervention

Outcome measures

Primary outcome

Local and systemic cytokine production.

Secondary outcome

1. Pulmonary complications;
2. Ventilation time;
3. ICU stay;
4. Hospital stay.

Study description

Background summary

Esophageal cancer is associated with high morbidity, mainly due to pulmonary complications. During the thoracic phase of (robot-assisted) transthoracic esophago-lymphadenectomy, the right lung is deflated to achieve optimal vision. In an animal model, deflation and reinflation of the lung have lead to increased local and systemic cytokine production. This might be the cause of pulmonary complications. Positive airway pressure on the collapsed lung might lead to decreased cytokine production, resulting in less pulmonary complications.

Study objective

Continuous positive airway pressure on the deflated lung prevents total alveolar collapse, resulting in less local and systemic cytokine response, causing less pulmonary complications.

Intervention

Continuous Positive Airway Pressure (CPAP) to the collapsed lung during single-lung-ventilation vs no CPAP.

Contacts

Public

University Medical Center Utrecht (UMCU)
Department of Surgery
 G04.228

R. Hillegersberg, van
Heidelberglaan 100
Utrecht 3584 CX
The Netherlands
+31 (0)88 7558074
Scientific
University Medical Center Utrecht (UMCU)
Department of Surgery
 G04.228

R. Hillegersberg, van
Heidelberglaan 100
Utrecht 3584 CX
The Netherlands
+31 (0)88 7558074

Eligibility criteria

Inclusion criteria

1. Patients with resectable carcinoma of the esophagus or junction that will undergo robot-assisted thoracoscopic esophago-lymphadenectomy with gastric conduit formation;
2. ASA classification < 4;
3. Written informed consent.

Exclusion criteria

1. Moderate/severe lung function impairment ascertained by pulmonary function tests, requiring high dose steroid therapy;
2. No epidural catheter.

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Masking:	Single blinded (masking used)
Control:	Active

Recruitment

NL

Recruitment status:	Pending
Start date (anticipated):	05-04-2006
Enrollment:	30
Type:	Anticipated

Ethics review

Positive opinion

Date:	28-03-2006
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	NL589
NTR-old	NTR645
Other	: N/A
ISRCTN	ISRCTN61458115

Study results

Summary results

N/A