Randomised trial comparing the use of suction with underwater seal versus only an underwater seal applied to chest drains following lung resection

| Submission date | Recruitment status No longer recruiting | Prospectively registered | | |
|------------------------------|---|--------------------------------|--|--|
| 29/09/2006 | | ☐ Protocol | | |
| Registration date 29/09/2006 | Overall study status Completed | Statistical analysis plan | | |
| | | [X] Results | | |
| Last Edited | Condition category | [] Individual participant data | | |
| 15/02/2010 | Surgery | | | |

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Contact details

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Additional identifiers

Protocol serial number

N0013145914

Study information

Scientific Title

Study objectives

Is there a difference between the two groups with respect to the three primary outcomes?

Ethics approval required

Old ethics approval format

Ethics approval(s)

Not provided at time of registration

Study design

Randomised controlled trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Surgery: Lobectomy

Interventions

Chest drains connected to an underwater seal are routinely left in the chest cavity (pleural space) following lung resections. They provide a one way escape route for any air that might leak from the surface of the lung and for any fluid that might collect in the chest cavity. This helps to maintain a negative pressure in the pleural cavity and facilitates lung expansion. We propose to compare the duration of air leak following lung resection between two groups of prospectively randomised patients one of which will have suction applied to the underwater seal. We will record the time to the last air leak and then determine any statistically significant difference (if any) between the two groups.

Randomisation will be into two groups: 1. chest drain connected to water seal only 2. chest drain connected to water seal and wall suction applied to the water seal at 3 kPa. Suction started in the recovery room immediately after the operation.

Intervention Type

Procedure/Surgery

Phase

Not Specified

Primary outcome(s)

- 1. Time to last bubble (air leak time)
- 2. Time to removal of drain
- 3. Time to discharge home

Key secondary outcome(s))

Not provided at time of registration

Completion date

01/06/2003

Eligibility

Key inclusion criteria

Cases eligible to be included in the trial: all lobectomies, all wedges, all lung biopsies, all operations of pneumothorax.

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

Not Specified

Key exclusion criteria

Lung volume reduction surgery and pneumonectomies.

Date of first enrolment

01/06/2002

Date of final enrolment

01/06/2003

Locations

Countries of recruitment

United Kingdom

England

Study participating centre Cardiothoracic Surgery

London United Kingdom SE17EH

Sponsor information

Organisation

Record Provided by the NHSTCT Register - 2006 Update - Department of Health

Funder(s)

Funder type

Government

Funder Name

Guy's and St. Thomas' NHS Foundation Trust (UK), Own Account

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

| Output type | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|-----------------|---------|--------------|------------|----------------|-----------------|
| Results article | results | 01/03/2005 | | Yes | No |