Cost and efficacy of dissection devices in extended and parenchyma preserving liver resection: a prospective randomised trial

Submission date Recruitment status Prospectively registered 01/07/2008 No longer recruiting [] Protocol [] Statistical analysis plan Registration date Overall study status 28/08/2008 Completed [X] Results [] Individual participant data Last Edited Condition category 30/06/2009 Cancer

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

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

N/A

Study information

Scientific Title

Acronym

LDD (Liver Dissection Devices)

Study objectives

Evaluate the surgical safety and the costs of different commercially available liver dissection devices.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Ethics approval received from the local Ethical Committee of the University of the Saarland in March 2005 (ref: 47/05)

Study design

Single-centre, randomised, single-blind study

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Hospital

Study type(s)

Treatment

Participant information sheet

Health condition(s) or problem(s) studied

Primary or secondary hepatic malignacy

Interventions

Liver resection with three different liver resection (dissection) devices:

- 1. Selector® (Erbe, Tübingen, Germany)
- 2. Helix HydroJet® (Erbe, Tübingen, Germany)
- 3. Dissecting Sealer 3.0® (TissueLink Medical, Dover, NH, USA)

Total duration of follow-up in all treatment arms was until discharge from hospital, no further follow up was performed.

Intervention Type

Device

Phase

Not Specified

Primary outcome measure

- 1. Blood loss
- 2. Intraoperative and postoperative blood transfusions
- 3. Dissection time
- 4. Resection area
- 5. Dissection speed
- 6. Blood loss per dissected area
- 7. Post-operative International Normalised Ratio (INR)
- 8. Post-operative partial thromboplastin time (PTT)
- 9. Post-operative bilirubin levels
- 10. Morbidity (bleeding, bile fistula, cholangitis, liver abscess, pleura effusion, pneumonia, cardiac complications)
- 11. Intensive Care Unit (ICU) stay
- 12. Hospital stay

Primary and secondary outcomes were measured during the hospital stay.

Secondary outcome measures

- 1. Mounting time
- 2. Costs of devices (system costs)
- 3. Maintenance costs
- 4. Costs of additional haemostyptic items
- 5. Costs of staplers and magazines

Primary and secondary outcomes were measured during the hospital stay.

Overall study start date

01/09/2003

Completion date

30/06/2005

Eligibility

Key inclusion criteria

All patients undergoing liver resection for primary or secondary hepatic malignancy of any age and gender.

Participant type(s)

Patient

Age group

Not Specified

Sex

Both

Target number of participants

96

Key exclusion criteria

- 1. Cirrhosis or cholestasis (serum bilirubin greater than 25 mg/dl)
- 2. Prior chemotherapy (within 6 months) and multiple liver tumours

Date of first enrolment

01/09/2003

Date of final enrolment

30/06/2005

Locations

Countries of recruitment

Germany

Study participating centre

Department of General-, Visceral-, Vascular- and Paediatric Surgery

Homburg/Saar Germany 66421

Sponsor information

Organisation

University of Saarland (Germany)

Sponsor details

Department of General-, Visceral-, Vascular- and Paediatric Surgery Kirrberger Strasse Gebaeude 57

Homburg/Saar

Germany 66421

Sponsor type

University/education

Website

http://www.uni-saarland.de/en/

ROR

https://ror.org/01jdpyv68

Funder(s)

Funder type

Other

Funder Name

Investigator initiated and funded (Germany)

Results and Publications

Publication and dissemination plan

Not provided at time of registration

Intention to publish date

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	01/06/2009		Yes	No