Fluid restriction following open aortic aneurysm surgery

Submission date	Recruitment status	Prospectively registered
26/01/2010	No longer recruiting	Protocol
Registration date	Overall study status	Statistical analysis plan
14/07/2010	Completed	Results
Last Edited	Condition category	Individual participant data
18/04/2017	Surgery	Record updated in last year

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 A091805

Study information

Scientific Title

Does peri-operative fluid restriction affect renal function following major abdominal aortic surgery? A single-centre randomised controlled trial

Acronym

PORAS

Study objectives

Fluid restriction following elective open infra-renal abdominal aortic surgery will affect biomarkers of renal impairment.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Cambridgeshire 3 Research Ethics Committee (REC), 08/01/2010, ref: 09/H0306/87

Study design

Single-centre randomised controlled trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Elective infra-renal aortic aneurysm surgery

Interventions

The intervention group will have a fluid-restricted regime of 1.5 l intravenous (IV) fluid per day post-operatively compared to 3 l in the standard regime group. Of course, there is provision for fluid resuscitation in the event that the patient requires this.

The total duration of treatment is 5 days and the follow-up is only inpatient.

Intervention Type

Procedure/Surgery

Phase

Not Applicable

Primary outcome(s)

Urinary levels of interleukin-18 (IL-18), neutrophil gelatinase-associate lipocalin (NGAL), retinol binding protein (RBP), albumin/creatinine ratio (ACR), measured at baseline (pre-operative), 6 hours, 12 hours, 24 hours, day 2 ,day 3, day 4, day 5

Key secondary outcome(s))

All measured as inpatient outcomes:

- 1. All major complications
- 2. Major adverse cardiac event (myocardial infarction, unstable angina, arrhythmia)
- 3. Respiratory complications (including need, duration and extent of ventilatory support)
- 4. Neurological complications (delirium, stroke)
- 5. Mortality
- 6. Length of stay
- 7. Intensive care unit (ITU)/high dependency unit (HDU) stay

- 8. Wound dehiscence
- 9. Gastrointestinal outcome measures:
- 9.1. Time to passage of first flatus
- 9.2. Time to passage of first faeces
- 9.3. Nausea scores
- 9.4. Time to resumption of normal diet

Completion date

01/04/2011

Eligibility

Key inclusion criteria

Elective patients (aged over 18 years, either sex) undergoing open infra-renal abdominal aortic aneurysm (AAA) repair

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

ΔII

Key exclusion criteria

- 1. Patients undergoing endovascular aortic aneurysm repair
- 2. Patients undergoing emergency surgery
- 3. Elective suprarenal AAA repair
- 4. Severe cardiac failure (New York Heart Association [NYHA] grade IV or myocardial infarction [MI] less than 3 months)
- 5. Pre-operative serum creatinine greater than 150 mg/dL
- 6. Pre-operative serum urea greater than 20 mmol/dl
- 7. Previous history of renal disease
- 8. Previous renal transplant
- 9. Patient scheduled to have simultaneous renal procedure at time of surgery
- 10. Established renal failure requiring renal replacement therapy
- 11. Previous history of hepatic disease

Date of first enrolment

01/02/2010

Date of final enrolment

01/04/2011

Locations

Countries of recruitment

United Kingdom

England

CB2 2QQ

Study participating centre Addenbrookes Hospital Cambridge United Kingdom

Sponsor information

Organisation

Cambridge University Hospitals NHS Foundation Trust (UK)

ROR

https://ror.org/04v54gj93

Funder(s)

Funder type

Charity

Funder Name

Addenbrooke's Charitable Trust, Cambridge University Hospitals

Alternative Name(s)

Addenbrooke's Charitable Trust, Cambridge University Hospitals NHS Foundation Trust, ACT

Funding Body Type

Private sector organisation

Funding Body Subtype

Other non-profit organizations

Location

United Kingdom

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?

Participant information sheet
Participant information sheet
11/11/2025 No Yes