

The incidence of hand ischaemia following different techniques for formation of elbow arteriovenous fistula

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| Submission date 27/01/2010 | Recruitment status No longer recruiting | <input checked="" type="checkbox"/> Prospectively registered |
| Registration date 04/05/2010 | Overall study status Completed | <input type="checkbox"/> Protocol |
| Last Edited 16/11/2017 | Condition category Urological and Genital Diseases | <input type="checkbox"/> Statistical analysis plan |
| | | <input type="checkbox"/> Results |
| | | <input type="checkbox"/> Individual participant data |
| | | <input type="checkbox"/> Record updated in last year |

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

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Additional identifiers

Study information

Scientific Title

Randomised controlled trial comparing incidence of hand ischaemia following creation of either conventional brachiocephalic fistula or proximal ulnar/radial-cephalic fistula

Study objectives

The risk of developing dialysis access-associated steal syndrome is lower in proximal ulnar/radial-cephalic fistula group than in brachiocephalic fistula group.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Cambridgeshire 1 Research Ethics Committee pending approval as of 28/01/2010

Study design

Prospective randomised controlled trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

End stage renal failure for permanent dialysis

Interventions

The patients recruited for the trial would be randomised to have either conventional brachiocephalic fistula formation or fistula formation using proximal radial or ulnar artery. The patients suitable for elbow AV fistula would be identified in nephrology clinic and then referred to vascular assess clinic where the patients who are suitable for the trial would be consented. The patients recruited would be randomised to have one of the two techniques of fistula formation. They would be put onto the next available list for fistula formation which would be carried out by experienced transplant specialist registrars or senior clinical fellows.

Immediate post-operative outcomes would be recorded. The first follow up would be carried out in vascular assess clinic 2 to 3 weeks after the operation where patients would have digital pressure measurement and would be assessed for presence of symptoms suggesting of fistula-associated hand ischaemia. Further follow up would be carried out at monthly intervals in the first 3 months and then three-monthly thereafter. Patients who develop hand ischaemia symptoms would be assessed immediately by the vascular assess team at Addenbrooke's Hospital either when the patient self present or via referral by their local dialysis unit. The intended follow-up period is up to 12 months.

Intervention Type

Procedure/Surgery

Primary outcome(s)

Presence of dialysis access-associated steal syndrome:

1. Digital pressure measurement
2. Symptoms: cold hand, pain, finger sensibility, strength, cramps
3. Signs: capillary refill time, ulcers, gangrenes
4. Requirement for intervention, surgical revision or ligation

Measured at post-operative vascular assess clinic 2 to 3 weeks after the operation or at any timepoint when patients develop ischaemic symptoms up to 12 months follow-up.

Key secondary outcome(s)

1. Primary (unassisted) patency rate
2. Secondary (assisted) patency rate
3. Complications: haemorrhage, wound infection, stenosis, thrombosis, aneurysm

Assessed at follow up clinic at monthly interval for the first 3 months and then 3-monthly thereafter.

Completion date

31/05/2012

Eligibility**Key inclusion criteria**

1. Aged 17 to 90 years, either sex
2. Suitable for elbow autogenous arteriovenous (AV) fistula as primary or secondary access for haemodialysis

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Key exclusion criteria

Patients unable to give consent

Date of first enrolment

01/06/2010

Date of final enrolment

31/05/2012

Locations**Countries of recruitment**

United Kingdom

England

Study participating centre

Addenbrooke's Hospital
Cambridge
United Kingdom
CB2 0QQ

Sponsor information

Organisation

Cambridge University Hospitals NHS Foundation Trust (UK)

ROR

<https://ror.org/04v54gj93>

Funder(s)

Funder type

Hospital/treatment centre

Funder Name

Addenbrooke's Hospital (UK)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration