

Double-blind clinical trial of taurolidine-citrate for the prevention of infection in patients using tunnelled lines for haemodialysis

Submission date 09/08/2009	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered
Registration date 18/09/2009	Overall study status Completed	<input type="checkbox"/> Protocol
Last Edited 28/07/2010	Condition category Infections and Infestations	<input type="checkbox"/> Statistical analysis plan
		<input checked="" type="checkbox"/> Results
		<input type="checkbox"/> Individual participant data

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
Taurolidine-citrate catheter locks for the prevention of bacteraemia in patients using tunnelled intravascular catheters for haemodialysis: a randomised double-blind controlled trial

Study objectives

The primary aim of this study is to evaluate the feasibility, efficacy and cost-effectiveness of taurolidine line locks in the prevention of bacteraemia in haemodialysis patients using tunnelled lines starting at the time of line insertion and whether use of taurolidine from the time of line insertion is associated with an increased need for thrombolytic therapy.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Cumbria and Lancashire B Research Ethics committee approved on the 4th July 2006 (ref: 06 /Q1309/30)

Study design

Randomised double-blind controlled trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Catheter-related bacteraemia

Interventions

Patients will randomised to receive either taurolidine-citrate or standard heparin (5000 IU/ml) line locks at the time of catheter insertion and after every dialysis until an end-point of the trial. Taurolidine will be supplied as 1.35% taurolidine and 4% citrate (TauroLock™, Tauropharm AG). Heparin will supplied as heparin sodium, Ph Eur (porcine) at 5000 IU/L with 1% benzylic acid as preservative (Braun AG). This trial will be completed six months after the recruitment of the last participant.

Intervention Type

Drug

Phase

Not Applicable

Drug/device/biological/vaccine name(s)

Taurolidine-citrate, heparin

Primary outcome(s)

1. 'Intention to treat' analysis of symptomatic and asymptomatic bacteraemic episodes. A bacteraemic episode will be defined by a single positive blood culture. Symptoms will be judged clinically on the basis of fever or rigors associated with dialysis. Measured by a positive blood culture at the time when the patient has relevant symptoms
2. A comparison of the unassisted line patency rate between the two treatment groups. This will be based on the need for thrombolytic therapy or radiological intervention. Detected by a requirement to use of thrombolytic therapy and the date when this happened.

Key secondary outcome(s)

1. The type of bacterium, outcome of treatment with antibiotics and relapse rate in those patients with proven infection
2. C-reactive protein concentrations
3. Haemoglobin concentrations, measured monthly
4. Erythropoietin requirement, recorded every two weeks
5. Blood flows, recorded every two weeks
6. Electron microscopy of removed lines to look for Biofilm

Completion date

30/09/2008

Eligibility**Key inclusion criteria**

1. Adult patients (aged greater than 18 years), either sex
2. Requirement for dialysis using a tunnelled dialysis line
3. Able to give informed consent

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

All

Key exclusion criteria

1. Children aged less than 18 years
2. Unable to give informed consent
3. Positive blood culture in previous seven days
4. Unstable bleeding diathesis or hypercoagulable state

Date of first enrolment

01/11/2006

Date of final enrolment

30/09/2008

Locations**Countries of recruitment**

United Kingdom

England

Study participating centre

Renal Unit

Preston

United Kingdom

PR2 9HT

Sponsor information

Organisation

Lancashire Teaching Hospitals NHS Foundation Trust (UK)

ROR

<https://ror.org/02j7n9748>

Funder(s)

Funder type

Government

Funder Name

Lancashire Teaching Hospitals NHS Foundation Trust (UK) - internal funding

Funder Name

Central Manchester University Hospitals NHS Foundation Trust (UK) - internal funding

Funder Name

Royal Liverpool Hospital NHS Trust (UK) - internal funding

Funder Name

North West Kidney Research Association (UK) - small grant from the Preston Branch

Funder Name

Liverpool Regional Dialysis Unit Fund (UK) - small grant

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	01/06/2010		Yes	No