A randomised controlled trial to assess the effect of bone graft extender added to allograft in revision hip replacement

	Prospectively registered
No longer recruiting	<pre>Protocol</pre>
Overall study status	Statistical analysis plan
Completed	Results
Condition category	Individual participant data
Surgery	Record updated in last year
	Completed Condition category

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

N0203114901

Study information

Scientific Title

A randomised controlled trial to assess the effect of bone graft extender added to allograft in revision hip replacement

Study objectives

Does the addition of bone graft extender material to morcellised allograft in revision surgery of the femoral or acetabular component of a total hip replacement improve the clinical or radiological result when compared to allograft alone?

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: Revision hip replacement

Interventions

A randomised prospective clinical trial is to be set up to test the efficacy of bone graft extenders in comparison with 100% allograft (to study the effect of the addition of a synthetic bone graft extender material to allograft bone used in impaction grafting at revision hip arthroplasty). Patients who fulfill the entry criteria will be randomized into two groups: one group will have the morcellised bone for their reconstruction mixed with bone graft extender in a 50:50 ratio, and the other group will not. The patients will be followed up for 5 years. Twelve patients to be initially included into each arm of the trial. The numbers needed for the

study have been calculated from previous discussions with Dr Greco at the RDSU regarding a project with similar endpoints and expectation outcomes. Based on the analysis of operating schedules over a 12 month period (July 2000-2001), 40 patients were identified who would have been considered as suitable for inclusion in this study.

Intervention Type

Procedure/Surgery

Phase

Not Specified

Primary outcome(s)

Outcome measures include complications, clinical scores and gross radiological appearances. In addition movement of the construct at each interface will be assessed by the technique of Radio Stereometric Analysis (RSA).

Study endpoints: Life Tables and Survival Curves with confidence limits for different definitions of failure including implant loosening and radiological evidence of failure including implant migration (as defined by RSA), excessive wear, radiolucencies etc. Log rank comparison.

Key secondary outcome(s))

Not provided at time of registration

Completion date

29/08/2007

Eligibility

Key inclusion criteria

- 1. Patients requiring revision hip arthroplasty for aseptic femoral or acebular component loosening.
- 2. Age less then 85
- 3. Femoral bone stock loss equivalent to Endoklinik 2 or 3 (loss of cancellous bone in the proximal femur, possible parosteal increase in dimension but essentially a cavitary defect only with no need for reconstruction meshes or long stems). Therapeutic research.

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Senior

Sex

Not Specified

Key exclusion criteria

Not provided at time of registration

Date of first enrolment

30/08/2002

Date of final enrolment

29/08/2007

Locations

Countries of recruitment

United Kingdom

England

Study participating centre

Royal Devon & Exeter Hospital (Wonford)

Exeter, Devon United Kingdom EX2 5BW

Sponsor information

Organisation

Department of Health (UK)

Funder(s)

Funder type

Hospital/treatment centre

Funder Name

Royal Devon and Exeter NHS Trust (UK)

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 she

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

Yes