

# Does intramedullary plugging reduce blood transfusion requirements in total knee replacement?

<b>Submission date</b> 18/12/2009	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 09/02/2010	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 31/05/2017	<b>Condition category</b> Surgery	<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

**Protocol serial number**  
Version 1, dated 24.08.09

## Study information

**Scientific Title**

Does intramedullary plugging reduce blood transfusion requirements in total knee replacement?  
A randomised controlled clinical trial

### **Study objectives**

To assess if intramedullary plugging, when used together with an autologous retransfusion drain, reduces blood loss to make significant differences in allogenic blood requirements in patients undergoing total knee replacement.

### **Ethics approval required**

Old ethics approval format

### **Ethics approval(s)**

Berkshire Research Ethics Committee (REC), 20/11/2009, ref: 09/H0505/117

### **Study design**

Randomised controlled parallel-group trial

### **Primary study design**

Interventional

### **Study type(s)**

Treatment

### **Health condition(s) or problem(s) studied**

Trauma and Orthopaedics - total knee replacements

### **Interventions**

Patients who have total knee arthroplasty will be randomised into two groups. One group will have intramedullary plugging with retransfusion drains and one group will have retransfusion drains only.

### **Intervention Type**

Procedure/Surgery

### **Phase**

Not Applicable

### **Primary outcome(s)**

Allogenic blood transfusion requirements

### **Key secondary outcome(s)**

Post-operative blood loss assessed by:

1. Haemoglobin levels in first 3 days of the post-operative period
2. Total amount of blood collected in drain in the first 24 hours after surgery

### **Completion date**

30/01/2011

## **Eligibility**

**Key inclusion criteria**

1. Male and female patients
2. Aged 50-90 years
3. Undergoing primary total knee replacement surgery

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Other

**Sex**

All

**Key exclusion criteria**

Patients undergoing unicompartmental knee replacements and revision knee replacements

**Date of first enrolment**

24/12/2009

**Date of final enrolment**

30/01/2011

**Locations****Countries of recruitment**

United Kingdom

England

**Study participating centre**

Royal Berkshire NHS Foundation Trust

Reading

United Kingdom

RG1 5AN

**Sponsor information****Organisation**

Royal Berkshire NHS Foundation Trust (UK)

ROR

https://ror.org/034nvrd87

## Funder(s)

### Funder type

Hospital/treatment centre

### Funder Name

Royal Berkshire NHS Foundation Trust (UK) - Trauma and Orthopaedic Department

## 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?
<a href="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes