

# Evaluation of external beam radiation to prevent restenosis after femoropopliteal stenting

<b>Submission date</b> 24/02/2006	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 24/02/2006	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 04/03/2009	<b>Condition category</b> Circulatory System	<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

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**

## Study information

### Scientific Title

Prospective, multicentre, randomised double blinded evaluation of external beam radiation to prevent restenosis after femoropopliteal stenting to treat atherosclerotic stenosis or occlusion of femoropopliteal arteries

### Study objectives

The external beam radiation will significantly increase the arterial lumen diameter at the treatment site, two years after stenting and will lead to an improvement of the ankle-brachial index.

As of 16/07/2008, this trial record has been updated, and changes to the inclusion and exclusion criteria performed. For more details, please see all changes in these fields under the above update date.

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

Comités d'évaluation scientifique et d'éthique de la recherche, Équipe Hôpital Notre-Dame du CHUM, Montréal, Québec (Canada) approved on the 9th September 2005.

### Study design

Randomised controlled trial

### Primary study design

Interventional

### Secondary study design

Randomised controlled trial

### Study setting(s)

Hospital

### Study type(s)

Treatment

### Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

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

Peripheral vascular disease/femoropopliteal artery obstruction

### Interventions

1. Femoropopliteal stenting: Group A and B
2. External radiation (24 hours post-stenting): Group A

3. Clinical follow-up, evaluation of side effects, ankle-brachial index and Doppler ultrasound (every 6 months): Group A and B

4. Angiography (at 24 months): Group A and B

### **Intervention Type**

Other

### **Phase**

Not Applicable

### **Primary outcome measure**

A lower restenosis rate (greater than or equal to 50%) in the radiation group than in the control group, as measured by angiography 24 months after stenting

### **Secondary outcome measures**

A higher ankle-brachial index, a lower reintervention rate, and a lower amputation rate in the radiation group, with similar side-effects and complications in both groups

### **Overall study start date**

01/10/2005

### **Completion date**

30/09/2010

## **Eligibility**

### **Key inclusion criteria**

Current inclusion criteria as of 16/07/2008:

1. 45 years and older, either sex
2. Femoropopliteal lesion greater than 4 cm above knee joint
3. Symptomatic lesion category 2 - 6 on Rutherford scale
4. Thrombosis or stenosis greater than 70% category A, B or C
5. Restenotic or de novo lesion, less than or equal to 20 cm
6. Ipsilateral ankle-brachial index (ABI) at rest less than or equal to 0.95
7. Written informed consent

Previous inclusion criteria:

1. 45 years and older, either sex
2. Femoropopliteal lesion greater than 4 cm above knee joint
3. Symptomatic lesion category 2 - 6 on Rutherford scale
4. Thrombosis or stenosis greater than 70% category A, B or C
5. Restenotic or de novo lesion, less than 15 cm
6. Ipsilateral ankle-brachial index (ABI) at rest less than or equal to 0.85
7. Written informed consent

### **Participant type(s)**

Patient

### **Age group**

Adult

**Sex**

Both

**Target number of participants**

214

**Key exclusion criteria**

Current exclusion criteria as of 16/07/2008:

1. Contraindication to angiography or angioplasty or to clopidogrel
2. Recurrent lesion already treated by stenting
3. Prior irradiation or infection to the expected radiation site
4. Prior use of doxorubicine or other radiosensibilising agent
5. Patient susceptible to be pregnant
6. Hemodynamically significant lesion above the femoropopliteal lesion
7. Inability to give informed consent or to complete the follow-up
8. Life expectancy of less than 2 years
9. Superficial femoral lesion treated with a view to a lower limb bypass initiated below site of femoro-popliteal endovascular revascularisation
10. Femoro-popliteal lesion located at least 2 cm below the groin (4 cm in the case of obese patients). For purposes of radiography the lesion should be located at 2 cm (4 cm in the case of obese patients) below the lower edge of the femoral head.

Previous exclusion criteria:

1. Contraindication to angiography or angioplasty or to clopidogrel
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4. Prior use of doxorubicine or other radiosensibilising agent
5. Patient susceptible to be pregnant
6. Hemodynamically significant lesion above the femoropopliteal lesion
7. Inability to give informed consent or to complete the follow-up
8. Life expectancy of less than 2 years

**Date of first enrolment**

01/10/2005

**Date of final enrolment**

30/09/2010

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

Canada

**Study participating centre**

Hôtel-Dieu du CHUM

Montreal

Canada

H2W 1T8

# Sponsor information

## Organisation

Hôtel-Dieu de Montréal (Canada)

## Sponsor details

3840 rue St-Urbain

Montréal

Canada

H2W 1T8

## Sponsor type

Hospital/treatment centre

## ROR

<https://ror.org/0468gx405>

# Funder(s)

## Funder type

Research organisation

## Funder Name

Canadian Institutes of Health Research (CIHR) (Canada) - <http://www.cihr-irsc.gc.ca> (ref: MCT-78566)

# Results and Publications

## Publication and dissemination plan

Not provided at time of registration

## Intention to publish date

## Individual participant data (IPD) sharing plan

## IPD sharing plan summary

Not provided at time of registration