

# PREVENTION OF SURGICAL SITE INFECTION AT THE GROIN AFTER FEMORAL ARTERIAL EXPOSURE USING LOCAL GENTAMYCIN SPONGE PROSPECTIVE, RANDOMISED, CONTROLLED TRIAL

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The aim of this study is to test the hypothesis that a gentamicin-collagen sponge reduces the incidence of surgical site infection (SSI) in patients undergoing inguinal dissection for vascular disease

|                              |                                 |
|------------------------------|---------------------------------|
| <b>Ethical review</b>        | Approved WMO                    |
| <b>Status</b>                | Recruiting                      |
| <b>Health condition type</b> | Vascular therapeutic procedures |
| <b>Study type</b>            | Interventional                  |

## Summary

### ID

NL-OMON38160

### Source

ToetsingOnline

### Brief title

Implantable Gentamycin sponge and surgical site infection at the groin

### Condition

- Vascular therapeutic procedures

### Synonym

Surgicale site infection, wound infection

### Research involving

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24-05-2025

Human

## Sponsors and support

**Primary sponsor:** Atrium Medisch Centrum

**Source(s) of monetary or material Support:** Ministerie van OC&W

## Intervention

**Keyword:** garacol, gentamycin, SSI (Surgical Site Infection)

## Outcome measures

### Primary outcome

The incidence of surgical site infection (SSI), including prosthetic graft infection classified according to Szilagyi, through 30 days postoperatively by a committee blinded to study allocation

### Secondary outcome

Length of the incision (measured postoperatively and photographed).

Quantitative microbial count of skin flora immediately post-incision between two treatment groups when purulent fluid evacuates from the wound. (Isolation of bacteria in colony forming units (CFU))

Creatinine, Leukocyte numbers and CRP measured at day 1 post-operative, at discharge and at 2 weeks.

Bypass patency was confirmed by noninvasive hemodynamic Doppler studies on the first postoperative day and by duplex 6 weeks after index operation.

Postoperative complications are recorded.

Length of hospital stay.

Re-admission and reoperation.

Use of intravenous or oral antibiotic during hospital stay and at home

# Study description

## Background summary

Despite the routine use of prophylactic systemic antibiotics, inguinal surgical site infection still occurs in 4-44% in patients undergoing femoral exposure for central or peripheral arterial disease and is associated with significant excess morbidity, mortality, and costs. A large, 2-center, randomized trial in Sweden reported in 2005 that a gentamicin-collagen sponge, a surgically implantable topical antibiotic, reduced surgical site infection by 50% in patients undergoing cardiac bypass surgery.

The aim of this study is to test the hypothesis that a gentamicin-collagen sponge reduces the incidence of surgical site infection (SSI) in patients undergoing inguinal dissection for vascular

## Study objective

The aim of this study is to test the hypothesis that a gentamicin-collagen sponge reduces the incidence of surgical site infection (SSI) in patients undergoing inguinal dissection for vascular disease

## Study design

The study is designed as a prospective, randomized, controlled trial

## Intervention

The study arm will receive the implantable gentamicin collagen sponge and the control arm will not receive a sponge at the end of the vascular procedure before closing the groin

## Study burden and risks

1 extra visit to the out-patient clinic  
possible allergic reaction to gentamicin  
possible reduction of woundinfections

# Contacts

## Public

Atrium Medisch Centrum

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6419 PC, Heerlen  
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**Scientific**  
Atrium Medisch Centrum

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## Trial sites

### Listed location countries

Netherlands

## Eligibility criteria

### Age

Adults (18-64 years)

Elderly (65 years and older)

### Inclusion criteria

All patients undergoing femoral incision for primary arterial repair.

Patients are 18 years or older, and both sexes can participate.

Signed informed consent

### Exclusion criteria

Patients known with a sensitivity or allergy to gentamicin.

Patients pregnant or breast feeding.

In case of bilateral groin dissection for vascular surgery, the left groin is excluded.

Patients undergoing femoral incision for endovascular procedures

## Study design

## Design

|                     |                               |
|---------------------|-------------------------------|
| Study type:         | Interventional                |
| Intervention model: | Parallel                      |
| Allocation:         | Randomized controlled trial   |
| Masking:            | Single blinded (masking used) |

**Primary purpose:** Treatment

## Recruitment

|                           |            |
|---------------------------|------------|
| NL                        |            |
| Recruitment status:       | Recruiting |
| Start date (anticipated): | 27-04-2012 |
| Enrollment:               | 608        |
| Type:                     | Actual     |

## Medical products/devices used

|               |                       |
|---------------|-----------------------|
| Product type: | Medicine              |
| Brand name:   | Garacol               |
| Generic name: | gentamicin            |
| Registration: | Yes - NL intended use |

## Ethics review

|                    |                                   |
|--------------------|-----------------------------------|
| Approved WMO       |                                   |
| Date:              | 19-03-2012                        |
| Application type:  | First submission                  |
| Review commission: | METC Z: Zuyderland-Zuyd (Heerlen) |

## Study registrations

### Followed up by the following (possibly more current) registration

No registrations found.

## Other (possibly less up-to-date) registrations in this register

No registrations found.

## In other registers

| Register | ID                     |
|----------|------------------------|
| EudraCT  | EUCTR2011-001786-40-NL |
| CCMO     | NL36728.096.11         |