

# Operative management of 281 Achilles tendon ruptures ;a 10 year clinical retrospective analysis

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We think that the results of this study could be the start of other studies and eventually lead to international standards for treatment of Achilles tendon ruptures.

<b>Ethical review</b>	Approved WMO
<b>Status</b>	Recruitment stopped
<b>Health condition type</b>	Bone and joint injuries
<b>Study type</b>	Observational non invasive

## Summary

### ID

NL-OMON38370

### Source

ToetsingOnline

### Brief title

Achilles tendon rupture case series

### Condition

- Bone and joint injuries
- Bone and joint therapeutic procedures

### Synonym

achilles tendon rupture, rupture of the achilles tendon

### Research involving

Human

### Sponsors and support

**Primary sponsor:** Onze Lieve Vrouwe Gasthuis

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

## Intervention

**Keyword:** achilles tendon rupture, open surgical repair, percutaneous repair, rerupture

## Outcome measures

### Primary outcome

Rerupture rates, complications and active range of motion of the ankle of patients surgically treated for a Achilles tendon rupture.

### Secondary outcome

Patient satisfaction scores and subjective and objective function scores for patients surgically treated for Achilles tendon rupture using the following scoring systems: VISA-A, VAS, ATTRS, Leppilathi, SF12.

Other parameters:

The following baseline values will be collected:

- DVT
- pulmonary embolism
- fluorquinolones/steroid use
- diabetes, cardiovascular disease, smoking
- sport and level of practice
- age
- gender
- weight/height

The following injury related values will be collected:

- affected side

- pre-existent achillotendinopathie
- wound infection (superficial/deep)
- nerve damage (n.suralis)
- calf circumference
- active range of motion
- muscle strength
- time until OK

## Study description

### Background summary

Rupture of the Achilles tendon is one of the most common tendon injuries in the adult population.[1] In the past few decades, the incidence of Achilles tendon rupture has increased in parallel with increased sports participation. Seventy-five percent of Achilles tendon rupture cases described in published studies are sports-related.[2]

Treatment options for acute Achilles tendon rupture include nonsurgical and surgical management. If the treating physician opts for nonsurgical treatment, the patient is treated non-operatively in a cast, cast-boot, or splint with the foot placed in plantar flexion, with or without early physiotherapy. Surgical options include open, minimally invasive, and percutaneous repair of the tendon.[3] Although the optimal treatment remains controversial[4], there is a trend towards surgical treatment in athletes.[2,5]

Various open and minimally-invasive surgical techniques have been described, but there is no consensus as to which technique has the best results regarding incidence of rerupture, sural nerve injury and strength.[6]

The objective of this study is to assess the rerupture rate, Achilles tendon function and patient satisfaction after treatment of a Achilles tendon rupture with a open surgical reconstruction or a percutaneous reconstruction of the Achilles tendon.

### Study objective

We think that the results of this study could be the start of other studies and eventually lead to international standards for treatment of Achilles tendon

ruptures.

## Study design

Retrospective case series study. Patients will be asked to fill out forms (VISA-A, VAS, ATTRS,SF12). Physical examination will be performed in the OLVG by the examiner in order to complete the Leppilathi score

## Study burden and risks

Patients will have to visit the OLVG hospital one time for physical examination (aprox. 20 minutes). Expencc allowance will be offered. Patients will also be asked to fill out four questionnaires by them selves at home (aprox. 20 minutes). There are no risks associated with participation. Burden en risk are nill, therefore this research is justified.

## Contacts

### Public

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### Scientific

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## Trial sites

### Listed location countries

Netherlands

## Eligibility criteria

### Age

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Adults (18-64 years)  
Elderly (65 years and older)

## Inclusion criteria

Patients treated in the period 2002-2012 for a complete rupture of the achilles tendon at the OLVG.

Age : 18-65 Years

Treatment initiated <72h after rupture

Diagnosis through palpable gap and positive Thompson test

Informed consent

## Exclusion criteria

- rerupture/ bilateral rupture/ open rupture
- combination of rupture with a fracture of the foot/ankle
- previous treatment with local anesthetics
- fysical/mental handicaps that may possibly interfere with follow-up
- APR treated with conservative treatment

## Study design

### Design

**Study type:** Observational non invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Treatment

### Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 12-02-2014

Enrollment: 281

Type: Actual

## Ethics review

Approved WMO

Date: 29-01-2014

Application type: First submission

Review commission: MEC-U: Medical Research Ethics Committees United (Nieuwegein)

## 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
CCMO	NL47098.100.13