# Splinting or surgery for carpal tunnel syndrome

Submission date [ ] Prospectively registered Recruitment status 11/02/2002 No longer recruiting [X] Protocol [ ] Statistical analysis plan Registration date Overall study status 11/02/2002 Completed [X] Results [ ] Individual participant data Last Edited Condition category 27/10/2022 Nervous System Diseases

#### Plain English summary of protocol

Not provided at time of registration

## Contact information

## Type(s)

Scientific

#### Contact name

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## Additional identifiers

**EudraCT/CTIS** number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers OG97-013

## Study information

#### Scientific Title

Splinting or surgery for carpal tunnel syndrome

#### Study objectives

- 1. To determine the short and long-term efficacy of splinting compared with early surgery in relieving Carpal Tunnel Syndrome (CTS) symptoms
- 2. To assess from a societal perspective the cost-effectiveness of these treatment options

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

The Medical Ethics Committees of the 13 participating hospitals approved the study protocol.

#### 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

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

Carpal tunnel syndrome

#### **Interventions**

- 1. Wrist splint
- 2. Open carpal tunnel release

#### Intervention Type

Other

#### Phase

**Not Specified** 

#### Primary outcome measure

- 1. General improvement, scored by the patient on a 6-point ordinal transition scale, ranging from 'completely recovered' to 'much worse'
- 2. The number of nights that the patient awoke, due to the symptoms, during the past week
- 3. The severity of the most important symptoms

In order to study short and long-term treatment effects, data are collected in the hospital at baseline and at 3, 6 and 12 months after randomisation. Additional postal questionnaires are sent to the patients in the months that they do not visit the hospital (1, 2, 4, 5, 7, 8, 9, 10 and 11 months after randomisation), and again 18 months after randomisation.

#### Secondary outcome measures

- 1. Patient satisfaction, using an 11-point numerical rating scale, ranging from 0 'very unsatisfied' to 10 'completely satisfied'
- 2. Use of pain medication for the symptoms during the past week (yes/no)
- 3. The severity of symptoms and functional status, assessed by means of a self-administered questionnaire, containing two scales (the Symptom Severity Scale and the Functional Status Scale)
- 4. The overall severity of CTS complaints
- 5. Results of electrodiagnostic studies

#### Other outcome measures:

- 1. Compliance with treatment
- 2. Adverse effects
- 3. Direct and indirect costs
- 4. Success of blinding

In order to study short and long-term treatment effects, data are collected in the hospital at baseline and at 3, 6 and 12 months after randomisation. Additional postal questionnaires are sent to the patients in the months that they do not visit the hospital (1, 2, 4, 5, 7, 8, 9, 10 and 11 months after randomisation), and again 18 months after randomisation.

### Overall study start date

01/01/2002

#### Completion date

01/01/2003

## **Eligibility**

#### Key inclusion criteria

- 1. Pain, paraesthesias and/or hypoesthesias in the hand, in the area innervated by the median nerve
- 2. Clinical diagnosis of CTS has to be confirmed by electrodiagnostic studies
- 3. Aged 18 years or older
- 4. Able to complete written questionnaires (in Dutch)

#### Participant type(s)

Patient

#### Age group

Adult

#### Lower age limit

18 Years

#### Sex

### Target number of participants

190

#### Total final enrolment

176

#### Key exclusion criteria

- 1. Already been treated with a wrist splint or have had previous carpal tunnel release
- 2. A history of wrist or median nerve injury from trauma (e.g. contusion, fractures) or prior surgery on the wrist
- 3. A history suggesting underlying causes of CTS, such as diabetes mellitus, thyroid disease, rheumatoid arthritis, chronic renal failure treated by hemodialysis, space-occupying lesions in the volar wrist area, anatomic abnormalities of the wrist or hand
- 4. Pregnancy or lactation
- 5. Clinical signs or symptoms, or electrodiagnostic studies suggesting conditions that could mimic CTS or interfere with its validation, such as cervical radiculopathy, brachial plexopathy, thoracic outlet syndrome, pronator teres syndrome, ulnar neuropathy, polyneuropathy, Raynaud's disease or sympathetic dystrophy
- 6. Severe thenar muscle atrophy

#### Date of first enrolment

01/01/2002

#### Date of final enrolment

01/01/2003

## Locations

#### Countries of recruitment

Netherlands

## Study participating centre

**EMGO-Institute** 

Amsterdam Netherlands 1081 BT

## Sponsor information

#### Organisation

Dutch Health Care Insurance Company (The Netherlands)

#### Sponsor details

Amsterdam Netherlands

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### Sponsor type

Government

## Funder(s)

### Funder type

Government

#### **Funder Name**

Dutch Health Care Insurance Company (The Netherlands) (ref: OG 97-013)

#### **Funder Name**

Anna Fonds Foundation (The Netherlands)

## **Results and Publications**

#### Publication and dissemination plan

Not provided at time of registration

Intention to publish date

## Individual participant data (IPD) sharing plan

Not provided at time of registration

### IPD sharing plan summary

Not provided at time of registration

### **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol article		18/12/2001		Yes	No
Results article		11/09/2002	27/10/2022	Yes	No