

# Effectiveness of the use of a shoulder joint function orthosis" in shoulder joint subluxation after ischaemic brain stroke to avoid post hemiplegics shoulder-hand syndrome

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| <b>Submission date</b><br>07/11/2006   | <b>Recruitment status</b><br>No longer recruiting | <input type="checkbox"/> Prospectively registered    |
| <b>Registration date</b><br>13/02/2007 | <b>Overall study status</b><br>Completed          | <input type="checkbox"/> Protocol                    |
| <b>Last Edited</b><br>14/08/2012       | <b>Condition category</b><br>Circulatory System   | <input type="checkbox"/> Statistical analysis plan   |
|  |   | <input checked="" type="checkbox"/> Results          |
|  |   | <input type="checkbox"/> Individual participant data |

## Plain English summary of protocol

Not provided at time of registration

## Contact information

### Type(s)

Scientific

### Contact name

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### Contact details

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Germany  
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## Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

N/A

# Study information

## Scientific Title

## Acronym

FOSSIL

## Study objectives

Daily use of a shoulder joint function orthosis (Sporlastik) in shoulder joint subluxations after acute, ischaemic stroke can prevent the occurrence of a Shoulder-Hand-Syndrome (SHS) in comparison with a conservatively treated patient sample.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Approval received from the local ethics committee (Ethikkommission Bayerische Landesärztekammer) on the 17th October 2006 (ref: 06072).

## Study design

Two-armed, randomised, controlled, open trial.

## Primary study design

Interventional

## Secondary study design

Randomised controlled trial

## Study setting(s)

Not specified

## Study type(s)

Treatment

## Participant information sheet

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

Ischaemic stroke with hemiparesis of the upper extremity and following shoulder joint subluxation

## Interventions

Basic therapy for both groups, fitting of the shoulder joint function orthosis of the experimental group, and no additional measures for the control group.

## Intervention Type

Other

## Phase

Not Specified

## **Primary outcome measure**

Primary terminating point:

The sum of SHS scores on the days 14, 21 and 28:  $x = \text{SHS [d 14]} + \text{SHS [d 21]} + \text{SHS [d 28]}$

If a patient doesn't have a follow-up value (after day seven), he will not be considered evaluable. In this case the recruiting for the replenishment of the drop number continues. Otherwise, the definition of the primary terminating point with missing values or potentially terminator point affecting supplementary therapies, the following rules apply:

Missing values, which no raised values follows, are replaced by the last raised value (rational one: with SHS, the score will rather rise as to sink, without SHS, in reverse).

This procedure is conservative: the therapeutic effect is thereby rather underestimated than overrated. If an additional therapy was necessary because of SHS, which potentially affects the SHS Score, then each raised value will be replaced by the last value noted before begin of the therapy, as long as the value is smaller than the last value before therapy (rational ones: without additional therapy the condition would have probably been not better than before the beginning of the therapy; another worsening during therapy, however is considered with this calculation).

## **Secondary outcome measures**

Secondary terminating points:

Are the processes of the SHS score, of the muscle function, the anthropometry and the finger measurement over the four follow-up dates?

Furthermore, the processes of the SHS sub-scores as well as the categorical SHS evaluation will be analysed:

1. Zero to three: no SHS
2. Four to seven: uncertain
3. Eight to 14: SHS

More classifying of the SHS-Scores are formed, if this is put close by the distribution of the score values. Moreover, the data will be analysed in compliance with the four follow-up dates and telephone follow-ups. The entire compliance is formed by summarisation of the ordinal code values of the categories. Long-term terminator points are evaluated and judged by frequency and severances of the SHS symptomatology indicated by telephone follow-up.

## **Overall study start date**

21/11/2006

## **Completion date**

10/06/2007

# **Eligibility**

## **Key inclusion criteria**

1. Immediate ischaemic stroke with hemiparesis of the upper extremity (by Computed Tomography [CT] secured and proven) and following subluxation - immediate is defined within zero to 21 days after appearance
2. Hemiparesis of the upper extremity with a strength degree zero to three
3. Patient must be mobilised a minimum of four hours daily

4. Patients that have given their written consent
5. Patients of at least 18 years of age

**Participant type(s)**

Patient

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Not Specified

**Target number of participants**

50

**Key exclusion criteria**

1. Extreme neglect
2. Severe aphasia
3. Superpose or comatose patients
4. Patients with Passage syndrome
5. Patients that receive opioids and analogues
6. Disturbations in the areas of venous, lymphatic and arterial system within the localisation of the paretic arm, which contraindicates the fitting of the function or thesis
7. Planned or intended accompanied therapy:
  - a. physical therapy with depth-thermal treatment
  - b. additional therapy with thermal treatment (warmth/cooling)
8. Functional Electronic Stimulation (FES) of the hemiplegics shoulder
9. Contraindications of the producer:
  - a. allergic or inflammatory or injured conditioned skin changes (e.g. swelling, redness) of supplying body areas
  - b. circulation impairments or swelling of the soft, lymphatic tissues
  - c. neurogen caused disturbances of sensory and skintrophic symptoms in the supplying body region (feeling sensation is disturbed with or without skin damage)
10. Long lasting, continuous immobilisation, in particular with older people
11. Physical, psychological or mental inability to follow instructions

**Date of first enrolment**

21/11/2006

**Date of final enrolment**

10/06/2007

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

Germany

**Study participating centre**  
von Guttenbergstr.10  
Bad Neustadt  
Germany  
97616

## **Sponsor information**

**Organisation**  
Neurologische Klinik Bad Neustadt GmbH (Germany)

**Sponsor details**  
von Guttenberg - Str.10  
Bad Neustadt  
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97616

**Sponsor type**  
Government

## **Funder(s)**

**Funder type**  
Government

**Funder Name**  
Neurologische Klinik Bad Neustadt GmbH (Germany)

## **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

**Study outputs**

| Output type                     | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|---------------------------------|---------|--------------|------------|----------------|-----------------|
| <a href="#">Results article</a> | results | 01/09/2012   |            | Yes            | No              |