

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

Submission date 07/11/2006	Recruitment status No longer recruiting	☐ Prospectively registered
		☐ Protocol
Registration date 13/02/2007	Overall study status Completed	☐ Statistical analysis plan
		☒ Results
Last Edited 14/08/2012	Condition category Circulatory System	☐ 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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Additional identifiers

Protocol serial number

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

Study type(s)

Treatment

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(s)

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).

Key secondary outcome(s))

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.

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

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

Not Specified

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)

Funder(s)

Funder type

Government

Funder Name

Neurologische Klinik Bad Neustadt GmbH (Germany)

Results and Publications

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?
Results article	results	01/09/2012		Yes	No