# What is the clinical effect and cost effectiveness of treating upper limb spasticity due to stroke with botulinum toxin?

Submission date	Recruitment status No longer recruiting	[X] Prospectively registered		
06/08/2004		Protocol		
Registration date	Overall study status	Statistical analysis plan		
06/08/2004	Completed	[X] Results		
<b>Last Edited</b> 07/12/2010	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

**EudraCT/CTIS** number

**IRAS** number

ClinicalTrials.gov number

Secondary identifying numbers

# Study information

## Scientific Title

## **Study objectives**

Objective: To compare the upper limb (UL) function of patients with spasticity due to stroke who receive botulinum toxin injection(s) to the upper arm plus a four week evidence based UL therapy programme (intervention group) with patients who receive the UL therapy programme alone (control group) at 1 month after study entry.

Protocol can be found at http://www.hta.ac.uk/protocols/200200410006.pdf More details can be found at http://www.hta.ac.uk/1408

Please note that, as of 26/08/2009, the anticipated end date of this trial has been updated from 31/07/2008 to 28/02/2009.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Not provided at time of registration

## Study design

Randomised controlled 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

Upper limb spasticity due to stroke

## **Interventions**

Intervention: Botulinum toxin plus upper limb therapy programme Control: Upper limb therapy programme alone

## Intervention Type

## Drug

## Phase

**Not Specified** 

## Drug/device/biological/vaccine name(s)

Botulinum toxin

## Primary outcome measure

Action Research Arm Test (ARAT).

## Secondary outcome measures

ARAT at 3 and 12 months, Nine Hole Peg Test; biomechanical assessment of spasticity; motor impairment (Motricity Index and grip strength by dynamometer); UL pain (numerical rating scale). Assessment of patient-selected UL goals; disability (Barthel ADL Index); and quality of life (Stroke Impact Scale and EQ-5D).

## Overall study start date

01/02/2005

## Completion date

28/02/2009

# **Eligibility**

## Key inclusion criteria

- 1. Age over 18 years
- 2. At least 1 month since stroke
- 3. Upper limb (UL) spasticity (modified Ashworth scale >2 at the elbow and/or spasticity at wrist or shoulder
- 4. Reduced UL function but with some general function retained (Action Research Arm Test [ARAT] score 4-56)

## Participant type(s)

**Patient** 

## Age group

Adult

## Lower age limit

18 Years

#### Sex

Both

## Target number of participants

390

## Key exclusion criteria

- 1. Significant speech or cognitive impairment which will impede assessment. Participants must be able to understand and complete assessments (Abbreviated Mental Test Score [AMTS] >5 and Sheffield Aphasia score above age defined cut offs for receptive dysphasia).
- 2. Other significant upper limb impairment e.g. fracture or frozen shoulder within six months, severe arthritis, amputation
- 3. Evidence of contracture
- 4. Female patients who are pregnant or lactating or who are not willing to take adequate precautions against pregnancy for the duration of the study
- 5. Diagnosis likely to interfere with rehabilitation or outcome assessments e.g. registered blind, malignancy
- 6. Other diagnosis which may contribute to upper limb spasticity e.g. multiple sclerosis, cerebral palsy
- 7. Contraindications to intramuscular injection
- 8. Religious objections to blood products (botulinum toxin contains human albumen)
- 9. Contraindications to botulinum toxin which include bleeding disorders, myasthenia gravis and concurrent use of aminogycosides
- 10. Use of botulinum toxin to the upper limb in the previous three months
- 11. Known allergy or hypersensitivity to any of the test compounds

# Date of first enrolment 01/02/2005

Date of final enrolment 28/02/2009

# Locations

## Countries of recruitment

England

United Kingdom

Study participating centre School of Population & Health Sciences Newcastle upon Tyne United Kingdom NE2 4HH

# **Sponsor information**

## Organisation

The Newcastle Upon Tyne Hospitals NHS Foundation Trust (UK)

## Sponsor details

The Newcastle upon Tyne Hospitals NHS Trust Freeman Hospital Freeman Road High Heaton Newcastle upon Tyne England United Kingdom NE7 7DN

## Sponsor type

Hospital/treatment centre

## Website

http://www.newcastle-hospitals.org.uk/

## ROR

https://ror.org/05p40t847

# Funder(s)

## Funder type

Industry

## **Funder Name**

NIHR Health Technology Assessment Programme - HTA (UK)

# **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?
Results article	results	01/05/2010		Yes	No