Does surface neuromuscular stimulation (NMES) to the upper limb following stroke improve outcome?

Submission date	Recruitment status No longer recruiting	Prospectively registered		
12/09/2003		☐ Protocol		
Registration date	Overall study status	Statistical analysis plan		
12/09/2003	Completed	[X] Results		
Last Edited	Condition category	[] Individual participant data		
28/10/2010	Circulatory System			

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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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

N0504108438

Study information

Scientific Title

Study objectives

Upper limb impairment affects 80% of stroke patients, half of whom still experience problems three months later. Surface neuromuscular electrical stimulation (sNMES) after stroke may improve upper limb function but current evidence is inconclusive. We have undertaken a randomised controlled trial (RCT) to evaluate a programme of upper limb sNMES following acute stroke.

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)

Hospital

Study type(s)

Treatment

Participant information sheet

Health condition(s) or problem(s) studied

Cardiovascular: Stroke

Interventions

Randomised controlled trial to evaluate NMES. Patients hospitalised due to acute stroke randomised within 10 days to receive NMES or placebo for 4 weeks.

Intervention Type

Other

Phase

Not Specified

Primary outcome measure

Outcomes compared at end of treatment period and at 3 months. The primary outcome measure was the Action Research Arm Test (ARAT) 3 months after stroke.

Secondary outcome measures

Upper limb pain, disability and health status.

Overall study start date

01/11/2001

Completion date

01/01/2004

Eligibility

Key inclusion criteria

Between 1st January 2002 and 29th February 2004, subjects admitted with acute stroke to two stroke units were assessed against eligibility criteria: residence within 15 miles of participating hospitals; within 10 days of stroke onset; new upper limb impairment; medically stable; no cognitive/language impairments or previous upper limb problem likely to influence assessments; no other diagnosis likely to interfere with rehabilitation or significant previous co-morbidity; no contraindication to sNMES. Recruitment to begin at North Tyneside Hospital, funding applied for to extend recruitment to Wansbeck. Randomisation by a central independent telephone computerised service based at the University of Newcastle upon Tyne.

Participant type(s)

Patient

Age group

Adult

Sex

Both

Target number of participants

176

Key exclusion criteria

Not provided at time of registration

Date of first enrolment

01/11/2001

Date of final enrolment

01/01/2004

Locations

Countries of recruitment

England

United Kingdom

Study participating centre
North Tyneside General Hospital
North Shields, Tyne + Wear
United Kingdom
NE29 8NH

Sponsor information

Organisation

Department of Health (UK)

Sponsor details

Richmond House 79 Whitehall London United Kingdom SW1A 2NL

Sponsor type

Government

Website

http://www.doh.gov.uk

Funder(s)

Funder type

Government

Funder Name

Northumbria Healthcare NHS Trust (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 summaryNot provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Thesis results	thesis	31/03/2006		No	No
Results article	Results	01/12/2006		Yes	No