

is often poorly managed. Conservative interventions (e.g. bladder training, pelvic floor muscle training and prompted voiding) have been shown to have some effect with participants in Cochrane systematic reviews, but have not had their effectiveness demonstrated with stroke patients.

Method: A cluster randomised controlled pilot trial designed to assess the feasibility of a full-scale cluster randomised trial and to provide preliminary evidence of the effectiveness and cost-effectiveness of a systematic voiding programme for the management of continence after stroke. Stroke services were randomised to receive the systematic voiding programme, the systematic voiding programme plus supported implementation, or usual care. The trial aimed to recruit at least 500 participants in 12 stroke services (four per arm). The primary outcome was presence/absence of incontinence at six weeks post-stroke. Secondary outcomes included frequency and severity of incontinence, quality of life and cost-utility. Outcomes were measured at six weeks, 12 weeks and (for participants recruited in the first three months) 12 months after stroke. Process data included rates of recruitment and retention and fidelity of intervention delivery. An integrated qualitative evaluation was conducted in order to describe implementation and assist in explaining potential mediators and modifiers of the process.

Results: Findings from the six week primary and secondary effectiveness outcomes will be presented.

Tranexamic acid for acute intracerebral haemorrhage (TICH): Results of the first randomised controlled trial

Strigg N¹, Renton C¹, Kwong Y², Dineen R², Bath PM¹

¹Division of Stroke, University of Nottingham, UK

²Division of Neuroradiology, University of Nottingham, UK

Introduction: There is currently no effective treatment for intracerebral haemorrhage (ICH). Tranexamic acid (TA), an anti-fibrinolytic drug, significantly reduced mortality in bleeding patients following trauma in the large CRASH-2 trial. The CRASH-2 ICH sub-study found TA non-significantly reduced mortality and dependency.

Method: We performed a single centre, double-blind randomised placebo-controlled trial of TA (intravenous 1 g bolus, 1 g infusion/eight hours) in acute (<24 hours) primary ICH. The primary objective was to test the feasibility, tolerability and acceptability (adverse events) of TA in ICH. Other objectives assessed were the effect of TA on haematoma expansion, and death and dependency. Data are mean (standard deviation) or median [interquartile range].

Results: 24 patients were enrolled between March 2011 and March 2012. Mean age 68 years (13), male 15 (63%), baseline systolic blood pressure 166 mmHg (22), severity (NIHSS) 15 (9), Glasgow Coma Scale 13 (3), median time from stroke onset to randomisation 14 hours [4–20], time from randomisation to treatment 22 minutes [17–51]. Median baseline haematoma volume 17.3 ml [7.5–59.8 ml], haematoma locations were thalamic (ten patients), basal ganglia (eight patients) and lobar (six patients). Final follow up is on-going and the main results will be presented at the conference.

Conclusion: To our knowledge, this is the first randomised controlled trial of TA in ICH. Recruitment was on schedule (two patients/month) showing that the protocol can be delivered, the trial is feasible, and TA appears to be acceptable and tolerable. A larger study is needed to confirm safety and assess efficacy of TA in ICH.

Are tongue and lip exercises beneficial for post-stroke dysarthria?

Mackenzie C, Muir M, Allen C, Jensen A

School of Psychological Sciences and Health, University of Strathclyde, UK

Introduction: Dysarthria (a motor speech disorder) is a common post-stroke impairment, which is often persistent, affects wellbeing and impacts negatively on activity and participation. There has been little robust research into the benefits of speech and language therapy (SLT) for people with dysarthria following stroke. Exercises for the tongue and lips are often included in SLT management, despite the absence of firm evidence that practice of these non-speech oro-motor exercises (NSOMEXs) influences standard of speech.

Method: NONSPEX is a feasibility study involving people with chronic post-stroke dysarthria. 39 participants received eight SLT sessions targeting imprecise articulation. Participants were randomised to two groups where intervention included or did not include NSOMEXs. A single therapist was responsible for the conduct of all sessions with all participants. Treatment protocol fidelity monitoring was undertaken. SLT input was supplemented by a home practice schedule. Assessment data were collected by a single assessor, blind to group allocation, at two points before and two points after intervention, allowing variance to be examined across intervention and non-intervention periods.

Results: All data have been collected and results will be available on blind listener evaluations of speech intelligibility, communication effectiveness in conversation and tongue and lip movement and also self-ratings of situational communication effectiveness. Intervention evaluation data from 82% participants, who returned anonymous questionnaires, will be available.

Conclusion: The results are of potential importance to the SLT profession and will permit evaluation of whether progression to a larger scale, appropriately powered trial is merited.

Rapid Intervention with Glyceryl trinitrate (GTN) in Hypertensive stroke Trial (RIGHT): safety of GTN and potential of ambulance trials in ultra-acute stroke

Ankolekar S¹, Fuller M², Strigg N¹, Sare G¹, Geeganage C¹, Stokes L¹, Siriwardena N², Bath PMW¹ for RIGHT Investigators

¹Stroke Trials Unit, University of Nottingham, UK

²East Midlands Ambulance Service, UK

Introduction: To assess the safety of transdermal glyceryl trinitrate (GTN, nitric oxide donor) in patients with ultra-acute stroke (<4 hours).

Method: RIGHT (ISRCTN 66434824) was an ultra-acute, ambulance-based, single-blind, randomised controlled trial of GTN or control with blinded outcome assessment. Initial consent, randomisation, treatment and measurements were delivered by paramedics prior to hospitalisation. The primary outcome was systolic blood pressure (SBP) at two hours. Data are number (%) or median (range); comparisons by Mann-Whitney U-test.

Results: 41 patients were randomised over 22 months: age (median) 79 (49–92) years; male 54%; hypertension 66%; baseline FAST 3 (2–3); systolic BP 168 (137–234) mmHg; ictus to randomisation 55 (7–620) minutes; final diagnosis ischaemic 66%, haemorrhage 17%, TIA 5% and non-stroke 12%. GTN lowered SBP at 15 minutes, 153 (30) vs. 180 (47) mmHg ($P = 0.046$); and 120 minutes (primary outcome), 153 (31) vs. 174 (27) mmHg ($P = 0.028$). 75 paramedics (11 Nottingham ambulance stations) were trained, and five paramedics recruited three or more patients.

Conclusion: GTN lowered SBP at 15 and 120 minutes. Paramedics can deliver a trial in patients with ultra-acute presumed stroke. The full results, including at 90 days of follow-up, will be presented.