VISUOSPATIAL DYSFUNCTION AND STROKE REHABILITATION

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Introduction: Visuospatial dysfunction is associated with poor outcome in stroke patients. This may be due to sub-optimal management received by these patients in non-specialist settings.

Methods: The effects of visuospatial dysfunction were studied prospectively in 150 consecutive stroke patients with comparable stroke pathology and motor severity managed on a stroke unit. Outcome at discharge and length of hospital stay for patients with visuospatial dysfunction were compared with patients who did not have this impairment.

Results: Visuospatial dysfunction was present in 47 (32%) of the 146 patients (mean age 77.0±8.2 years; 42% men) included in the study. There were no differences in demography, pre-stroke function, motor power in the arm (2.6±1.7 v 2.3±2.1) or the leg (3.2±1.4 v 3.0±1.6) on the affected side and initial median Barthel scores (4 v 5) compared with 99 patients with no visuospatial dysfunction. Equal proportions of patients were discharged home (60% v 65%) or to institutions (34% v 33%) in both groups. Patients with visuospatial dysfunction had lower median discharge Barthel scores (14 v 16, p<0.01) despite comparable motor recovery. The duration of hospitalisation (64 v 36 days; p<0.001) and therapy input (47.7 v 27.8, p<0.01) were significantly greater in this group.

Conclusions: Patients with visuospatial dysfunction managed on a stroke unit have similar destination of discharge despite lower Barthel scores compared with patients of equal stroke severity who do not have this deficit. This may be due to greater therapy input, specific rehabilitation goals based on patient need or existence of mechanisms to optimise home environment and support after discharge.

DOES AGE INFLUENCE SEVERITY OF STROKE?

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Background: Elderly patients benefit from stroke unit care by a reduction in length of stay and incontinence is known to adversely affect recovery from stroke. An increasing age is associated with higher probability of discharge to residential care.

Aim: Does age influence severity of stroke as defined by the Barthel Index on admission? If the elderly patients have a more severe stroke is it due to age related factors, due to different CT scan findings or due to a different spectrum of stroke syndromes as defined by the Oxford Community Stroke Project (OCSP)?

Methods: 298 consecutive patients admitted with an acute stroke were examined for neurological deficit, classified as per OCSP and functional assessment performed using Barthel Index (BI) within 24-72 hours of admission. 205 of these had a CT scan while in the acute wards. Data was stored and analysed on Epi6. For analysis the age cut off of 70 years has been used. Severity is described as: severe stroke = BI 0-4, moderate = BI 5-10, mild 11-20 within three days of admission.

Results: Of the 298 patients 88 were in age group 34-70 years and 210 patients 71 years and above. p values are in brackets. While there was no difference between the two groups in stroke syndromes of TACI, PACLL, PAI, POCI (0.80); CT scan findings (0.27), side of the hemiplegia (0.48), proprioception (0.06), level of consciousness on Glasgow coma scale (0.55), sitting balance (0.43), motor power (0.67), dysphagia (0.07), the patients in the higher age group were significantly more incontinent (0.003), had atrial fibrillation (0.05) and pre-existing hypertension (0.01), lower BI ie more severe stroke (0.007), impaired standing balance (0.007) and more likely to be discharged to the geriatric unit for rehabilitation as compared to the stroke rehabilitation unit or home from the acute ward and to die in acute phase (0.0004). They were also more likely to require support with intravenous drugs and fluids (0.05), more dependent on Rankin scale (0.006) and receiving homecare prior to stroke (0.0001). Low Barthel Index was still evident when repeated at day five to seven in acute ward or prior to discharge from acute ward.

Conclusions: Our study of acute stroke patients indicates that the higher age group patients have a more severe stroke as defined by Barthel Index and their discharge destination from acute ward. This is not explained by the difference in OCSP stroke syndromes or CT scan findings. The higher incidence of incontinence and pre-stroke dependency partially explains this difference.

FOOD (FEED OR ORDINARY DIET) A MULTICENTRE INTERNATIONAL RANDOMISED TRIAL EVALUATING FEEDING POLICIES FOR PATIENTS HOSPITALISED WITH A RECENT STROKE: INTRODUCING THE CONCEPT OF A "FAMILY" OF TRIALS

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Introduction

There is wide variation in how patients are fed after stroke. The Food Trial aims to identify the best feeding policies for patients. To provide definitive answers, we plan to randomise at least 4000 patients in a family of three trials.

Methods

Patients admitted within 7 days of stroke onset in whom the clinician is uncertain about the best feeding policy can be randomised from the Day 1 to Day 30 of hospital admission. Feeding options, for patients who can swallow, are normal hospital diet OR normal hospital diet PLUS nutritional supplements, while the options for patients who cannot swallow are feeding via PEG (percutaneous endoscopic gastrostomy) OR NG (nasogastric) tube OR parenteral fluids and avoid tube feeding for at least 7 days. The primary outcome measures are the proportion of patients surviving free of dependency 6 months post randomisation, assessed via a postal or telephone questionnaire. Analyses will be based on intention to treat.

Results

We have already randomised over 100 patients in the pilot phase of whom 60% were able to swallow, 17% were undernourished, 25% were overweight at baseline and 18% were randomised into more than one of these trials. We have developed a system which ensures that patients enter the correct trial, that data collection is simple and which provides centralised blinded follow-up at 6 months.

Conclusions

The main advantages of a family of trials are that they rapidly answer several related questions in parallel and it is more efficient (ie less effort and money for each patient randomised). We hope to extend the "family" to include trials of different interventions to take advantage of this novel approach.