STROKE REHABILITATION REVISITED

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Introduction

The optimal model for stroke rehabilitation is unclear. In our service patients are transferred from an acute stroke unit to a dedicated 30 bed stroke rehabilitation unit (SRU) or to 1 of 10 stroke beds in a 28 bed geriatric rehabilitation unit (GRU) according to their address. Patient details and outcomes are recorded prospectively

Methodology

In a case controlled study 91 consecutive GRU admissions were matched with 91 SRU patients for age, sex, stroke classification and Barthel score on admission to rehabilitation. We compared survival, discharge destination, discharge function (Barthel score) and length of stay. Statistical analysis was with Wilcoxon Rank Sum and Mann-Whitney U tests.

Results

91 (12 male) GRU patients aged 78 (62-95) years and 91 (15 male) SRU patients aged 79 (60-95) years were transferred at median day 7 post stroke. Admission Barthel scores were similar: GRU median 58 (range 2-99) and SRU 53 (0-100). 68% and 65% respectively had severe impairment (Barthel <70). There was no difference in outcomes of death/several with impairment (GRU 23%: SRU 19%). Discharge destination (home 72%:72%) median discharge Barthel (95 (15-100): 94 (2-100)) M. Length of stay was shorter in the GRU [34 (3-206)days (2-152) days] p <0.05.

Conclusion

Stroke rehabilitation in the geriatric rehabilitation unit was as effective as that in the dedicated stroke rehabilitation unit and was associated with a reduction in length of stay.

HOME BLOOD PRESSURE MONITORING MARKEDLY REDUCES THE PREVALENCE OF ORTHOSTATIC HYPOTENSION (OH) IN NORMAL ELDERLY SUBJECTS

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Introduction

OH is an important contributing factor for falls in the elderly but reproducibility is poor. The ‘alerting’ reaction resulting in high supine clinic BP readings may overestimate the prevalence of OH, but ambulatory BP monitoring (ABPM) minimises this effect.

Aims

To determine prevalence of OH measured in clinic and at home.

Methods

52 healthy elderly independent subjects were recruited by advert (men = 27) mean age 70 years (range 63-90). BP measured supine and standing on 2 occasions in clinic and on three separate occasions (on waking, after midday meal and in the evening) during 24-h ABPM.

Results

Mean clinic BP was 152 ± 8/92 ± 2 mmHg and 24-h BP was 126 ± 7/51 ± 1 mmHg. BP changes to posture are recorded as shown

<table>
<thead>
<tr>
<th>Clinic</th>
<th>Postural SBP change</th>
<th>% SBP fall &gt;20mmHg</th>
<th>% DBP fall &gt;10mmHg</th>
<th>% with OH 22 occasions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinic 1</td>
<td>-4.0 ± 2.5†</td>
<td>23</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Clinic 2</td>
<td>-4.0 ± 2.0†</td>
<td>12</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>ABPM am</td>
<td>6.0 ± 4.0</td>
<td>2</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>ABPM pm</td>
<td>0.7 ± 1.4*</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>ABPM eve</td>
<td>2.6 ± 1.5*</td>
<td>4</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

*p<0.05 compared to ABPM am, †p<0.05 compared to mean ABPM difference. - sign = postural BP fall. Home postural BP changes were significantly smaller than clinic values. There was considerable variation throughout the day in postural BP change at home.

Conclusions

(i) Significant differences exist between postural BP change recorded by patients at home and by doctors in the clinic. (ii) Reproducibility of OH changes depends on time of day, recording method and place of recording.

atrial fibrillation and cognitive function: A case control study

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Introduction

Non - valvular atrial fibrillation (NVAF) confers an increased risk of clinical and silent cerebral infarction when compared with sinus rhythm. Hypothesis: people with NVAF are at increased risk of cognitive impairment due to silent cerebral infarction.

Methods

27 NVAF cases (16M; mean age 71.96 ± 1.45 (S.D.)) and 54 age - matched controls in sinus rhythm (32M; age 72 ± 1.02) were selected from GP records. Subjects with previous stroke or dementia were excluded. The mean known duration of NVAF was 5.04 years (range 1 - 23). Cases and controls were visited by a single observer. Clinical examination was performed and neuropsychological tests of cognitive function (1), IQ (2), attention (3,7,8), memory (4,5) and perception (6) were administered: 1. Mini mental state examination; 2. National Adult Reading Test; 3. Paced Auditory Serial Addition Test (PASAT); 4. Rey Complex Figure Test; 5. Wechsler Logical Memory Test; 6. Digit Span Subtest; 7. Map Search Task and 8. Telephone Task.

Results

A history of congestive cardiac failure (CCF) was more common in NVAF cases (p<0.05) but there were no significant differences in current symptoms or signs of CCF between cases and controls. There was a consistent trend for NVAF cases to perform less well than controls in all neuropsychological tests. Significant differences were seen for PASAT 4 seconds (p=0.005), PASAT 2 seconds (p=0.01) and 30 minute recall in the Logical Memory Test (2p=0.02). Performance in the tests was not associated with duration of AF.

Conclusions

Control subjects in sinus rhythm performed better than people with NVAF in a battery of neuropsychological tests. These findings require confirmation in a larger community study.