Musical abilities may outlast other faculties in advanced dementia

SIR—It is widely recognised that musical abilities may outlast other faculties in advanced dementia, and may become almost the sole means of communication between patient and carer. It is possible that a specific neural substrate may be identified. A fuller account is in preparation jointly by myself and Raya Jones (PhD) of Cardiff University. There are two details on which we have been unable to find relevant published information, and we would be grateful for any comments from Age and Ageing readers.

The first is the frequency of incidence of persistent musicality in dementia. Positive observations may be reported more often than negative ones, but one might expect that non-musicality in dementia would be at least as common as is amusia in health, reported as 4–5%. The other question concerns the nature of the dementia; in published accounts of continuing musicality, the specific type of dementia is rarely mentioned. It may be that in the middle and late stages all dementias are behaviourally similar; but it is also possible that the diagnostic information is not made available to the mainly non-medical people involved in the immediate caring profession.

Any relevant comments will, by permission and if time allows, be mentioned in the article now in preparation.

VERNON PICKLES
65 Yarnells Hill,
Oxford OX2 9BE, UK (retired)
Email: V.Pickles@btinternet.com
doi:10.1093/ageing/afi175

Methods to correct placement of a nasogastric tube: beware of the pitfalls

SIR—On 22nd February 2005, the National Patient Safety Agency issued new advice to the National Health Service on reducing harm caused by misplaced nasogastric tubes. They state that at least 11 patients have died as a result of misplaced nasogastric feeding tubes between December 2002 and December 2004. They recommend:

- pH of aspirate (stomach contents) should be measured using pH indicator strips in the range of 0–6 with half-point gradations.
- Radiography (X-rays) is recommended but should not be used routinely. Fully radio-opaque tubes with markings to enable measurement, identification and documentation of the external lengths should be used.

The following are not recommended:

- The ‘whoosh’ test which involves the use of a syringe to push a small volume of air down the nasogastric tube whilst the sounds produced are monitored with a stethoscope.
- Testing acidity/alkalinity of aspirate using blue litmus paper.
- Observing for signs of respiratory distress is often ineffective in detecting a misplaced tube.
- Monitoring for bubbling at the end of the tube is unreliable because the stomach also contains air and could falsely indicate respiratory placement.
- Observing the appearance of feeding tube aspirate is unreliable because gastric contents can look similar to respiratory secretions.

Any relevant comments will, by permission and if time allows, be mentioned in the article now in preparation.

LINDA J. E. WALKER
Mid-Ulster Hospital
Email: linwalk@doctors.org.uk
doi:10.1093/ageing/afi177

Inter-rater reliability of the Barthel Index

SIR—We have read with great interest the paper of Sainsbury et al. [1] focusing on the reliability of the Barthel Index (BI) when used with older people. We have recently evaluated the inter-rater reliability of two groups, one composed of clinical nurses expert in Gerontology and the other composed of Family Medicine residents when they were faced with BI [2]. The reliability of the BI has been well documented in stroke patients [1, 3] and it seems that it may be useful even when a single training session is offered to non-health care interviewers [4]. Nevertheless, we hypothesised that a larger training period may be necessary.

One hundred community-dwelling patients were assessed during a hospital admission episode due to diverse conditions. Eighteen patients were excluded because they were able to answer only a few questions. Previously, two weeks before admission, the BI (scored 0–100) [5] was evaluated through an interview. Sequential BI was assessed by clinical nurses in Gerontology and by residents of Family Medicine who had received a brief training session on BI, and additional scoring guidelines were facilitated. Previously, in a study that had included 30 patients, an excellent
inter-rater reliability was found between the two nurses in the total BI (Spearman; r=0.98) or in individual activities (Cohen’s kappa higher to 0.89 in all). When necessary (presence of cognitive impairment, delirium) the interviewers obtained responses from carers (n=21). The student’s t test, the chi-squared or Fisher’s exact test and the Spearman correlation test were used. Reliability was assessed with Cohen’s kappa test.

The sample was composed of 45 women (55%) and 37 men, with a mean age of 72.6 (±11) years. Mean BI, assessed by nurses, was 87.3 (±19) and by residents, 88 (±21). In 40 (48.7%) patients some differences in the mean values of BI were observed. When overall BI score was analysed, agreement was high (r=0.75), but the agreement inter-observer was low (kappa<0.4) in some fields (Table 1) such as feeding, grooming and transfers, and was medium in others (kappa from 0.40 to 0.75). When differences were analysed between those patients showing concordance and those who did not show it, the latter were older (76.2 versus 69.2; P<0.005), but there were no differences related to gender (P=0.6), either when the interview was done with the patient or with the carer (P=0.06).

We have observed that although the overall concordance was good, it was weak in some subsets.

These results suggest that the comparison should be done item by item; those items that showed higher differences were feeding, grooming and transfer. In conclusion, a low inter-rater reliability in the BI was observed when clinical nurses in Gerontology and Family Medicine residents were compared, thus suggesting that these need specific training in order to improve their BI use.

Table 1. Inter-rater reliability of the Barthel Index (Cohen’s kappa) results for individual activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Clinical nurse</th>
<th>Residents</th>
<th>Kappa value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeding</td>
<td>9.4 (1.8)</td>
<td>9.8 (0.9)</td>
<td>0.327</td>
</tr>
<tr>
<td>Bathing</td>
<td>3 (2.4)</td>
<td>3.3 (2.4)</td>
<td>0.683</td>
</tr>
<tr>
<td>Dressing</td>
<td>8.6 (2.2)</td>
<td>8.7 (2.4)</td>
<td>0.571</td>
</tr>
<tr>
<td>Grooming</td>
<td>4.6 (1.4)</td>
<td>4.6 (1.9)</td>
<td>0.395</td>
</tr>
<tr>
<td>Bowel</td>
<td>9.2 (2.2)</td>
<td>9.1 (2.5)</td>
<td>0.698</td>
</tr>
<tr>
<td>Bladder</td>
<td>8.2 (3)</td>
<td>7.7 (3.2)</td>
<td>0.589</td>
</tr>
<tr>
<td>Toilet use</td>
<td>9.3 (2.1)</td>
<td>9.2 (2.2)</td>
<td>0.636</td>
</tr>
<tr>
<td>Transfer</td>
<td>14 (3.2)</td>
<td>13.5 (3)</td>
<td>0.268</td>
</tr>
<tr>
<td>Walking</td>
<td>14.2 (3.2)</td>
<td>13.2 (3.7)</td>
<td>0.576</td>
</tr>
<tr>
<td>Stairs</td>
<td>7.9 (3.9)</td>
<td>7.5 (3.8)</td>
<td>0.403</td>
</tr>
</tbody>
</table>

Traumatic events and recall

SIR—I am writing to enquire from your readers whether they have any thoughts or are aware of research specifically relating to enhanced recall on events with high emotional valence? I am a psychologist who works with individuals who have been diagnosed with Alzheimer’s. I have been astonished how a number of my patients this week who are unable to tell me the current year correctly, or in some instances, where they are, are—a week on—asking me about news relating to the recent bombings on London public transport. Could it be that activation of the limbic system emotionally labels short term memory allowing it to be preserved and is this the same as déjà vu?

Stéphane Duckett
Chartered Clinical Psychologist
Email: Chris.Botterill@royalfree.nhs.uk

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Response to: Hypodermoclysis—a victim of historical prejudice

SIR—In their excellent article on hypodermoclysis (HDC), Barua and Bhownick [1] did not mention an additional disadvantage of intravenous cannulation, which I also failed to notice when I wrote on this subject [2]. I refer to the wholesale destruction of superficial veins. Now, in my 85th year, I have only two ‘good’ veins left—the result of having numerous intravenous infusions.

Whenever I am sent to hospital, I lie in trepidation and pray that my veins will remain intact. Recently, when I was admitted to hospital for mild dehydration, I besought the young doctor to respect the integrity of my remaining veins and give me a subcutaneous infusion. It was to no avail but, luckily, my veins survived.

Why is the comeback of HDC so sluggish? One reason may be the assumption that it is suitable only in geriatrics and palliative medicine. HDC has been used with great success in many medical fields since Cantani first made use of it to treat cholera in Naples at the end of the nineteenth century [3]. As