CORRESPONDENCE

Cholinesterase inhibitors and the heart in old age

We found the review by O'Brien & Oyebode (2003) useful in its scope and breadth. It is worth emphasising that many potential cardiovascular side-effects are more likely to occur in old age. Moreover, we would add that the cholinesterase inhibitors, a class of psychotropic medication not mentioned in the review, also have important effects on the cardiovascular system.

Cholinesterase inhibitors slow the degradation of acetylcholine in the synaptic clefts, thus improving the cholinergic deficit that has been a known feature of Alzheimer's dementia (as well as other dementias) for some time (Proctor, 2002). The cardiovascular effects of donepezil, one of the cholinesterase inhibitors, have recently been studied (McLaren *et al*, 2003). Some of these effects are probably common to this class of drug. The study (n=15) showed that heart rate variability, which is used to assess autonomic function, is impaired by donepezil in people with neurodegenerative dementia. It also revealed a tendency for hypotensive disorders to be exaggerated.

It is known that acetylcholine affects blood pressure and heart rate through both central and peripheral means. Accordingly, some of the cardiovascular effects of cholinesterase inhibition are predictable. Central mechanisms can lead to a rise in blood pressure and a corresponding bradycardia. In patients treated with cholinesterase inhibitors, 7–13% experience peripheral cholinergic side-effects (Nordberg & Svensson, 1998).

In older people, the risk of falls is a major concern. There is evidence that patients with Alzheimer's disease and dementia with Lewy bodies exhibit an unusually high prevalence of orthostatic hypotension and carotid sinus hypersensitivity (Ballard *et al*, 1998). Cholinergic inhibition is likely to make the tendency to fall greater in these patients (Ballard *et al*, 1999).

A retrospective study (with the advantage of being naturalistic but without controls) of 160 consecutive patients with dementia treated with cholinesterase inhibitors (Pakrasi *et al*, 2003) found that 2 patients (1.6%) experienced dysrhythmias and 1 (0.8%) experienced syncope in those treated with donepezil (n=125); 1 patient (11%) treated with galantamine (n=9) had a dysrhythmia; and 1 (3.8%) treated with rivastigmine (n=26) experienced syncope.

Thus, the potential for cholinesterase inhibitors to cause adverse cardiovascular effects and consequently falls and other serious morbidity in older people should not be overlooked.

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NCCG doctors have relationships too

We were interested to read the article by Drs Garelick and Fagin (Garelick & Fagin, 2004) on doctor-to-doctor relationships, which we agree is an important area to consider. However, we were disappointed to find that there was no mention of the relationship of consultants or training grade doctors with non-consultant career grade doctors.

Non-consultant career grade (NCCG) doctors, who include staff grades and associate specialists, play an important role in psychiatry and the number of posts is rising. The Department of Health considers NCCG doctors to be senior doctors, yet we have a position very different from that of consultants with regard to professional relationships. NCCG doctors are no longer in training grades but do not have consultant status with its associated position and authority.

Furthermore, the position of NCCG doctors changes with time. Initially, they may be recruited from the senior house officer (SHO) ranks and be regarded as such; however, as they gain experience, skills and expertise their roles change. This is brought into sharp focus when a newly qualified consultant is appointed to work with an NCCG doctor of many

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years' clinical experience. Issues of autonomy, supervision and mutual support arise in order that each can feel valued in their role.

NCCG doctors also relate to their peers, but in such a diverse group there may be conflicting interests, for example between those wishing to progress to the specialist register and consultant status and those who have chosen this career path, or between those wishing to study for examinations and those who seek to concentrate on service provision.

The role of NCCG doctors is likely to increase with the proposed changes to the consultant contract and training grade doctors' hours, and we would therefore be interested to hear the views of Garelick and Fagin on the relationships between NCCG doctors and others.

Garelick, A. & Fagin, L. (2004) Doctor to doctor: getting on with colleagues. *Advances in Psychiatric Treatment*, **10**, 225–232.

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Authors' response

We are grateful to Drs Budd & Everett for drawing attention to our omission of relationships between non-consultant career grade (NCCG) doctors and other grades in our article. This reflects the changing nature of medical staffing: a significant increase in the number of NCCG doctors has been stimulated by the European Working Time Directive restriction on junior doctors' hours and, for some, the unattractiveness of taking up a substantive consultant post at the earliest opportunity when they perceive that consultants face increasing bureaucracy and impingements on their professional freedom.

NCCG doctors indeed have a more complex relationship with other medical colleagues. Trainees and senior psychiatrists tend to have followed more predictable career patterns, whereas a striking diversity of pathways eventually lead a doctor to choose to apply for an NCCG post. Part of the difficulty arises from the fact that there are vast differences in the expectations of NCCG doctors: some see the post as a stop-gap or interval in their career, or have positive reasons for choosing not to proceed to consultant posts; others purposefully seek an alternative route to that grade, or take the job for the considerable financial gains of employment through locum agencies. All these will affect relationships in different ways.

We think it is fair to say that, until recently, NCCG doctors were appointed principally to fill in service requirements and had a second-class status within the hospital hierarchy. Only in the past few years has there been recognition that NCCG doctors have continuing development requirements, and that they need to be in regular supervision and appraisal scrutiny. The fact that there are accepted routes to the Certificate of Completion of Specialist Training (CCST) and possible consultantship from associate specialist positions has altered the status of NCCG doctors. This has inevitably affected the relationship between grades, to the point that now NCCG doctors are not infrequently represented on senior medical staff committees and, if experienced enough, are likely to take on management responsibilities. It is interesting that, with the shorter time that trainees (at both SHO and specialist registrar levels) are now expected to remain in each post, NCCG doctors have the opportunities to be involved in service development, audit and even research, which their other colleagues may find difficult.

There are still some incongruities in the position, however, which have an impact on job satisfaction for NCCG doctors. On the one hand, regardless of their experience they are likely to have to take on responsibilities that are similar to those of training-grade doctors; whereas on the other, the fact that they are likely to remain in post longer than their junior counterparts gives them an ascendancy akin to the consultant, and often they are asked to act for consultants in their absence. The introduction of the European Working Time Directive is likely to influence this relationship, as NCCG doctors will be called in to cover for absent trainees when they are working shift patterns. This inevitably creates a tension, which is difficult to resolve.

As Budd & Everett point out, relationships will also depend on the respective career stage at which consultants and NCCG doctors find themselves. We do think, however, that with increasing acceptance of clinical governance and recognition of professional development needs, NCCG doctors can take advantage of clinical and career opportunities that are opening up for them in the NHS. However, this will require considerable work in clarifying both roles and relationships with colleagues in the other grades.

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