

CORRESPONDENCE

Cholinesterase inhibitors and the heart in old age

We found the review by O'Brien & Oyeboode (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