Diabetes in later life – a time for pragmatism

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The largest rise in the prevalence and incidence of diabetes is among the older population, due to both the changing demographic – with increased numbers of older people – and the increasing prevalence of diabetes in that group. Approximately 6.9% of Caucasian older people have undiagnosed diabetes (Selvin et al, 2006), with this proportion rising to 25% among older South Asians (Sinclair et al, 2001). Care home patients not only have a higher prevalence of diabetes compared with other older people, but also increased morbidity associated with the condition. Diabetes in later life results in the same causes of morbidity seen in younger populations, but with the addition of increased risk of cognitive disorders and physical problems, such as falls and fractures (Gregg et al, 2002).

The diabetes National Service Framework highlights this rising prevalence of older people with diabetes, but also that they are under-represented in clinical studies, with few investigators recruiting older people (Department of Health, 2003). The recent recommendations in the NICE guideline for type 2 diabetes were not stratified by age, perhaps in a bid to avoid ageism (National Collaborating Centre for Chronic Conditions [NCCCC], 2008). However, the document does qualify any treatment decisions as being an agreed strategy between the person with diabetes, and his or her healthcare provider, tailored for their individual needs (NCCCC, 2008).

Latest data on glycaemic control

Recently completed studies have offered guidance on glycaemic management of people in later life, suggesting a pragmatic, rather than an aggressive, approach to lowering blood glucose levels, especially if this strategy is being followed to improve cardiovascular outcomes alone. Data from The VADT (Veterans' Administration Diabetes Trial) conducted among older US veterans, were reported at the European Association for the Study of Diabetes (EASD) meeting in Rome recently (Abraira, 2008). The aim was to assess the impact on cardiovascular events of intensive glucose control in addition to optimal control of risk factors for cardiovascular disease. The mean age of the group was 60 years, with an average duration of diabetes of 11.5 years. Long-term follow-up demonstrated that intensifying glycaemic control in a group of older patients with long-standing average control does not impact on cardiovascular outcomes unless other factors such as blood pressure control are also intensified.

We also know from analysis of the ACCORD (The Action to Control Cardiovascular Risk in Diabetes) study, that rapid lowering of blood glucose levels – enough to induce hypoglycaemia – may cause harm and increase mortality, with limited microvascular benefit (ACCORD Study Group, 2008). In the ADVANCE (Action in Diabetes and Vascular disease: preterAx and diamicroN-MR Controlled Evaluation) trial, where the mean age was 66 years, the benefit of the glycaemic control intervention on the combined micro- and macrovascular pimary outcome was seen in participants without a baseline history of macrovascular disease (ADVANCE Collaborative Group, 2008). All three of the above studies suggest that any benefit of tight glycaemic control is more likely when the disease is of shorter duration.

The 10-year follow-up from the end of the UKPDS (UK Prospective Diabetes Study) was also reported at the EASD meeting. In this study the average age of participants at recruitment was 54 years and they were followed up regularly – some for 30 years. This study demonstrated that the use of metformin remains important and only persistent intensive control reduces cardiovascular complications. (Holman et al, 2008a) This is especially true if good blood pressure control is not maintained (Holman et al, 2008b).

Clinical guidelines

The most important evidence-based guidance regarding the treatment of people over the age of 70 years with type 2 diabetes is the International Diabetes Federation-sponsored document *Clinical Guidelines for Type 2 Diabetes Mellitus*, produced by the European Diabetes Working Party for Older People 2001–2004 (2004). This document, currently being updated, systematically examines the evidence base for diabetes management in later life and includes treatment for both diabetes and cardiovascular risk, as well as functional impairment and physical disability and diabetes in care home residents (European Diabetes Working Party for Old Age, 2001–2004; 2004)

These guidelines recommend that older patients with type 2 diabetes should have a cardiovascular risk assessment, with a blood pressure target of 140/80 mmHg unless there are important clinical considerations, such as extreme frailty or dementia. All anti-hypertensive agents would appear to offer cardiovascular protection with similar long-term efficacy and safety. Also in the context of cardiovascular risk, lipid-lowering therapy should be considered (European Diabetes Working Party for Old Age, 2001–2004; 2004). Statin therapy can reduce the incidence of stroke by up to 21% in all patients (Amarenco et al, 2004).

Those dealing with the older population will know that adherence to therapy is a complex issue, where multiple therapies and coexistent morbidities are common and cognitive decline can have an effect.

The GMS contract negotiators felt it was important that the clinical indicators be evidence based, but were aware that not all patients were appropriate for the rigorous targets. Frail elderly patients were allowed to be excluded from rigorous targets by controlled exception reporting. There are differences in exception reporting rates between individual primary care organisations, but when this facility has been examined systematically there is little evidence of misuse of this clause by practices (Doran et al, 2006).

Summary

Type 2 diabetes is a heterogeneous disease, which does not respect age, gender or ethnicity and can be relentless in its progression. The person with diabetes in later life deserves to be empowered by their healthcare professionals to gain mastery of their condition should they so wish, but also have their current mental and physical status taken into account. Emerging data do not contradict this strategy for later life, merely suggesting that sustained moderate glycaemic control is better for cardiovascular outcomes than a sudden attempt to treat patients down to much lower glycaemic targets. ■

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