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COMMENTARY

Evidence based medicine, guidelines and common sense

HWEE-HUAN TAN[1], MARION E. T. MCMURDO[2], ANDREW D. MORRIS[3]

[1]Singhealth Polyclinics, Singapore Health Services, Singapore, Singapore
[2]Ageing and Health Department of Medicine, [3]Medicines and Monitoring Unit, University of Dundee Ninewells Hospital and Medical School, Dundee, UK

Address correspondence to: H.-H. Tan. Fax: (+65) 623 67129. Email: tan.hwee.huan@singhealth.com.sg

The American Geriatrics Society [1] has recently published a set of guidelines intended to help clinicians prioritize and attend to the particular needs of older people with diabetes mellitus. This is a welcome synthesis of the disappointingly sparse worldwide literature specifically targeted towards the needs of older diabetic people. The guidelines generally emphasise that the goals of diabetes care amongst older people remain similar to those in younger people, but acknowledge that these are likely to be complicated by the heterogeneity of the older diabetic population.

Common geriatric syndromes

The authors are to be congratulated in their call for attention towards the common geriatric syndromes, namely depression, injurious falls, urinary incontinence, cognitive impairment, chronic pain and polypharmacy. All may significantly influence quality of life and should be addressed in the overall management of an older diabetic patient. These six geriatric syndromes have been selected for inclusion into these guidelines as they are considered to be prevalent in older persons with diabetes. The authors recommend active and routine screening for these syndromes within 3–6 months from the initial consultation, using standardised screening tools. Although most of these screening recommendations are based on expert opinion alone, such recommendations may be justified given the necessity of having a high index of suspicion in making a diagnosis for such syndromes. The authors also boldly suggest that the good management of these syndromes in the older person may be considerably more important than the management of diabetes itself. While this assertion may strike a chord with geriatricians, it contradicts the practice of many diabetologists.

Cardiovascular risk factors

The guideline authors propose that control of cardiovascular risk factors may be more important than tight glycaemic control, as the older person is more likely to suffer from a macrovascular rather than a microvascular outcome. It is suggested that all older persons should routinely be offered smoking cessation interventions and low dose (81–325 mg/day) aspirin therapy, with blood pressure and LDL cholesterol kept below 140/80 mmHg and 2.6 mmol/l, respectively. This message takes into account the shorter time required to achieve benefits when addressing macrovascular risk factors (2–3 years), compared with ~8 years for improving glycaemic control. These recommendations are drawn upon strong evidence from a number of landmark randomized controlled trials. Clinicians must however be aware that most of these trials were either poor representatives of, or excluded completely, people over the age of 75 years [2]. The major trial results are often somewhat dubiously extrapolated to the older population, although there is some good recent evidence for the use of statins in older people [3, 4]. This pragmatic approach may well be appropriate; until better evidence is available, it is but prudent to initiate such therapies with cautious monitoring. The Systolic Hypertension in the Elderly Program (SHEP) warns us that presence of hypokalaemia and increase in serum uric acid during diuretic therapy for the treatment of systolic hypertension in the older person may, in fact, negate any expectant benefit to be derived from the therapy [5, 6].

Intensive glycaemic therapy

The most contentious issue in the management of diabetes in older people is the place of intensive glycaemic therapy. It is tempting for physicians to extrapolate the compelling evidence of the benefits of intensive therapy from the United Kingdom Prospective Diabetes Study (UKPDS) to all people with diabetes [7]. However, the mean age of a participant on entry in the UKPDS was only 53 years. The guideline authors are careful therefore to remind clinicians that there are currently no clinical trial data on the macrovascular and microvascular consequences of intensive glycaemia control specifically in older people. Bearing in mind the potential risk of hypoglycaemia and the adverse effects of drug therapy that often accompany declining renal function with age, the authors recommend that target

haemoglobin A1c (HbA1c) should be individualized. A goal of 7.0% or less should still be considered for older persons who are in good health or those with existing microvascular complications, while a target of 8% may be more appropriate for frail older people with reduced life expectancy. Such recommendations are intuitive but, at best, consistent with expert opinion. Unfortunately, clinical evidence in the elderly often lags behind advances in medicine that have led to an improved life expectancy in younger people, and a greater emphasis is required in ensuring adequate representation of elderly people in future clinical trials.

Risk of hypoglycaemia

The increased risk of hypoglycaemia is an inevitable consequence of attempts to achieve normoglycaemia. As geriatricians know, all older people with diabetes presenting with confusion should be investigated for hypoglycaemia, so it is disappointing that the guidelines omitted this important clinical practice message. The guidelines have recommended a schedule of self-monitoring of blood glucose to be based on the goals of care, target HbA1c levels, the potential for modifying therapy and the individual's risk for hypoglycaemia. Some studies have shown that given the appropriate training, older persons can be taught to perform self-monitoring of blood glucose and thus should not be excluded from participation in the management of their condition [8]. It is unfortunate, though, that the authors have not attempted to provide their readers with targets for self-monitoring of blood glucose for clinical practice. The authors suggested that the frail, the very old and those with frequent or severe episodes of hypoglycaemia should have a proper evaluation of their management plan, especially if they are prone to frequent and serious hypoglycaemia. It is not clear if this suggestion extends to the care of the institutionalized older person with diabetes, an important subgroup whose needs have not been addressed anywhere in these guidelines. Again, the lack of clinical evidence for such recommendations, although they appear sound, may make it difficult to implement in practice due to the lack of support in manpower and resources.

Metformin

As the UKPDS demonstrated that metformin is the only oral hypoglycaemic agent to reduce macrovascular outcomes, it may well be a cost effective drug therapy for older people and therefore warranted specific mention in the guidelines. The authors correctly call for extra vigilance when used in the elderly because of its association with the potentially fatal metformin-induced lactic acidosis, and recommend closer monitoring of the renal function as impaired renal function is a prevalent and often undiagnosed condition in the elderly. One other salient clinical factor that was not highlighted is the possibility of aggravating a state of vitamin B_{12} deficiency, especially in the presence of atrophic gastritis, a relatively common condition in the older person.

Conclusion

This set of guidelines is a useful contribution reminding us that older people with diabetes are a unique population and that better care of diabetes will require careful review of our current practice. The challenges ahead are many: one urgent need is for more research relating to the most appropriate package of care in older people with diabetes. While the new UK general practitioner contract takes into account only certain standard quality indicators of healthcare such as optimal levels of HbA1c, blood pressure and lipid profile, policy makers should appreciate that these indicators may not necessarily be the most valid means of assessing the care delivered to our older diabetic patients. In our pursuit to attain perfection in numbers, let us not forget to consider if our management plans for these older persons are appropriate, especially in relation to the achievement of strict targets for glycaemic control.

'There can be no general guidance on appropriateness of treatment – whether to be commenced, continued, withheld or withdrawn – because appropriateness should always reflect the individual circumstances and these will vary.' Scottish Chief Medical Officer's report on the healthcare for the older person [9].

Key points

- The heterogeneity of the older diabetic population complicates management.
- Attention towards common geriatric syndromes.
- Benefits and pitfalls to be considered in medical management.

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