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Age and Ageing editorial

Title: Perspectives on Hypertension Treatment in older persons

Raised blood pressure is probably the single most important treatable risk factor for cardiovascular disease in later life. The evidence for benefit from antihypertensive drugs in older people has accumulated with a succession of randomized controlled trials over the past 35 years, with reduced risk of stroke and myocardial infarction as well as decreased total mortality (1). However, despite the extensive evidence that is now available, questions remain about who to treat and on optimal blood pressure targets. Consequently practice varies widely and many clinicians are uncertain about what best to recommend for their older patients.

In this context, Age and Ageing and the Journal of the American Geriatrics Society are pleased to contribute to the debate in a joint initiative, publishing two articles that describe contrasting perspectives on this issue (2, 3).

The article by Conroy and Westendorp in Age and Aging (2) points out the benefits of treatment of hypertension in older persons (particularly in reducing stroke rates), however these authors emphasize the need to consider adverse effects and warn about problems caused by over-aggressive blood pressure lowering in older persons. These authors review issues related to the Systolic Blood Pressure Intervention Trial (SPRINT) (4), Heart Outcome Prevention Evaluation (HOPE) (5), and Hypertension in the Very Elderly Trial (HYVET) (6) studies and note that the participants in these trials are not as sick with multi-morbidity, frailty and polypharmacy as are many older persons including in general practice settings. They further emphasize the need for shared decision making with patients regarding whether or how aggressively to treat. These authors advise clinicians to consider a patient's likely longevity and estimates of the number needed to treat to inform patients in their decisions. They recommend the current European blood pressure treatment target of 150mmHg systolic and 90 mmHg diastolic, while emphasizing clinician and patient judgment in tailoring treatment decisions.

In their article for the Journal of the American Geriatrics Society, Cushman and Johnson(3), two leading SPRINT (4) investigators, present a discussion of the recent American College of Cardiology and American Heart Association (ACC/AHA) guidelines (7) for managing high blood pressure with a special focus on managing this disorder in older persons. The article presents a detailed rationale for why the US guidelines now recommend lower targets for systolic blood pressure and diastolic blood pressure management in older persons. The article nicely incorporates their perspectives based on the revised guidelines as well as findings from their SPRINT trial. They recommend a blood pressure threshold and treatment goal of systolic 130 mmHg and diastolic 80 mmHg in older patients with a 10-year cardiovascular disease risk of 10% or more. This includes the vast majority of persons over age 65 and all over age 70. This advice is heavily influenced by the results of the recent SPRINT trial. Although these authors do express concern over

the adverse effects of blood pressure lowering, their emphasis rests more on the need for clinicians to understand that the recent guidelines and results of the SPRINT study warrant a more aggressive approach to treatment goals in older persons, particularly those who have high baseline cardiovascular disease risk.

So where does this leave the clinician? For some older people blood pressure lowering for prevention of vascular disease will be a high priority, with the potential for substantial gains from setting a low treatment target. However for others antihypertensive treatment will be irrelevant or even harmful. The decision whether or not to treat hypertension in older age, and 'how low to go' remain a matter of expert clinical judgement, tailoring recommendations for antihypertensive treatment to the individual older person's specific characteristics and wishes.

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Conflict of interest:

None declared.

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