MANAGEMENT OF HYPERTENSION IN OLDER PEOPLE: THE EXPERIENCE IN BRUNEI

Tratamento da hipertensão em idosos: a experiência de Brunei

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Systolic hypertension of 160 mmHg and above is common in older people, as a result of reduction in vascular compliance. Although uncomplicated hypertension is not unusual in geriatric clinical practice, high-quality evidence has demonstrated increased rates of premature disability, all-cause mortality, stroke, and cardiac events in older patients with untreated moderate-to-severe hypertension.[1,2] For every 20-mmHg increase in systolic blood pressure (BP) and 10-mmHg increase in diastolic BP, there is an associated doubling of the risk of death from stroke and coronary artery disease.[1] A recent paper on hypertension also revealed the increasing prevalence of hypertension in older people, especially for those with multiple comorbidities.[2] A systematic population-based approach is required to optimally manage hypertension and its associated cardiovascular risks. In this paper, we share our considerations in developing or adapting guidelines for treatment of hypertension among older people (i.e., age 65 years and older) in primary care settings in Brunei.

There are no local studies on hypertension and its treatment among older people in Brunei. We reviewed available international guidelines and identified variability in recommendations for hypertension treatment targets for this age group. For example, the American College of Cardiology (ACC) advises treatment to a systolic BP below 130 mmHg,[3] the European Society of Cardiology (ESC) recommends a target systolic BP between 130 and 139,[4] while the UK National Institute for Health and Care Excellence (NICE) specifies a target BP below 140/90 mmHg for those under 80 years and below 150/90 mmHg for those over 80.[5] Despite these variations, adapting these guidelines to different population settings would require expert consensus and further discussion regarding which would be more appropriate for implementation.

In addition, the Systolic Blood Pressure Intervention (SPRINT) trial advocates treating patients at high risk of cardiovascular events without diabetes to a target systolic BP of less than 120 mmHg, as compared to less than 140 mmHg, which resulted in lower rates of fatal and non-fatal major cardiovascular events and death from any cause. This has not been reflected in guidelines, possibly due to apprehension concerning adverse effects.[6]

For the local guidelines, we wanted to emphasize treatment of hypertension, given its association with mortality from cardiac and cerebrovascular events. Apprehension or uncertainty among clinicians regarding hypertension treatment in older people may lead to undertreatment. In our setting, the ESC approach was adapted so that there is a specific goal for primary care clinicians to aim towards (systolic BP between 130 and 139 mmHg; diastolic BP < 80 mmHg), taking into account patient tolerability.[4]

There are several reasons for preferring the ESC approach. Although the SPRINT trial demonstrated that more intensive BP-lowering treatment (mean 124/62 mmHg) significantly reduced cardiovascular events and mortality compared to standard treatment (mean 135/67 mmHg), the BP measurement technique used generated lower values than those provided by conventional office measurement. It is suggested that the mean systolic BP achieved in intensively treated older people more closely reflects a conventional office systolic BP range of 130–139 mmHg.[6,7]

In our setting, there have also been cases of older people over-treated for hypertension, resulting in adverse events, particularly falls and orthostatic hypotension (unpublished local data). Therefore, it was felt that a target range (130–139 mmHg)

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rather than treatment to below a specific systolic BP (such as in the ACC and NICE guidelines)[3,5] would provide concrete guidance to clinicians, while reducing risk of treatment-related complications.

We also emphasized the importance of individualizing treatment and monitoring for orthostatic hypotension. Older people with frequent falls, orthostatic hypotension, advanced cognitive impairment, multiple comorbidities, and dependency, typically requiring residential care, are excluded from randomized controlled trials (including SPRINT),[6] as they have a high risk of adverse outcomes with intensive BP lowering. Due to the heterogeneity of older people in terms of comorbidities, polypharmacy, frailty, cognitive impairment, and variable life expectancy, clinicians should take an individualized approach towards hypertension management. Clinicians should also monitor for adverse effects, complications, or intolerance associated with treatment, including orthostatic hypotension and acute kidney injury.

As orthostatic hypotension is common in older people, our guidelines recommend proactive screening for this condition, especially for those with neurodegenerative disorders, such as Parkinson's disease, unexplained falls or syncope, peripheral neuropathy, frail older people, those on multiple medications, and patients with postural dizziness or nonspecific symptoms that occur with standing.[8]

Although several guidelines segregate older people based on cardiovascular risk, our local guidelines do not make any distinction, as we wanted to simplify them to focus on treating hypertension, especially in primary care. For most older people, the 10-year Atherosclerotic Cardiovascular Disease (ASCVD) risk is high, and antihypertensive drug therapy would be recommended at BP ≥ 130/80 mmHg.[3]

It is also important to mention that while intensive treatment of hypertension was advocated by the SPRINT trial,[6] the Valsartan in Elderly Isolated Systolic Hypertension Study (VALISH)[9] and the Japanese Trial to Assess Optimal Systolic Blood Pressure In Elderly Hypertensive Patients (JATOS)[10] both failed to demonstrate additional benefit in treating older people to a systolic blood pressure target of 140 mmHg compared to 160 mmHg in terms of cardiac events or mortality. Until this aspect is clarified through further clinical trials, we would advocate for hypertension treatment only provided it is done safely and does not cause harm to patients.

In summary, older people with hypertension benefit from treatment in primary care settings to a systolic BP 130–139 mmHg and diastolic BP < 80 mmHg as tolerated. It is important to monitor for intolerance and complications, particularly orthostatic hypotension. Our adapted guidelines do not segregate patients based on cardiovascular risk, to simplify their use in primary care and emphasize treatment of hypertension. Finally, as frail subjects with multiple comorbidities and limited life expectancy were excluded from most trials, the patient's preference, the clinician's judgement, and a combination thereof in a team-based approach is required to assess the risk/benefit ratio of the intensity of blood pressure lowering and choice of antihypertensive drugs in the elderly.

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