2003 Canadian hypertension recommendations

It's not all old hat

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Hypertension, the leading cause of morbidity and mortality among Canadians, is the foremost reason patients visit their family doctors. While blood pressure (BP) control rates remain poor, there is evidence that the process of creating recommendations is (indirectly) affecting rates of cardiovascular disease (CVD).[1-3] This year's process was atypical because of the landmark release of important clinical trials, such as the Antihypertensive and Lipid Lowering Treatment to Prevent Heart Attack Trial[4] (ALLHAT), the Losartan Intervention for Endpoint trial (LIFE),[5] and the Second Australian National Blood Pressure study (ANBP),[6] and the resulting "reopening and extension" of the yearly process into 2003.

Key messages in the current guidelines include the need to "consider global cardiovascular risk" when we "treat to target," the need to consider "combination therapy," the importance of "lifestyle intervention," and the need to "work on compliance—physician, patient, and patient's family unit." This overview highlights results of these considerations and specifically identifies new and not-new-but-still-important aspects of the recommendations.

Table 1. Key aspects of the 2003 recommendations for managing hypertension

WHAT'S NEW?
Broadened recommendations for first-line therapy to include angiotensin II receptor blockers
Simplification of recommendations for patients with diabetes and hypertension with the universal recommendation for either ARBs or ACE inhibitors as preferred therapy
WHAT'S THE SAME BUT STILL IMPORTANT?
Assessment of global atherosclerotic risk in hypertensive patients and lower BP targets for patients at highest risk.
The importance of lifestyle modification as a cornerstone of anti-atherosclerotic therapy.
The importance of drug combinations for blood pressure control with emphasis on the benefits of thiazide diuretics for all subgroups of hypertensive patients.
A focus on adherence, concordance, and compliance.

What's new in the 2003 recommendations?

The main focus of the 2003 update (**Table 1**) was incorporation of findings from major treatment studies from 2001 to 2002. These studies influenced recommendations in regard to therapeutic considerations for:

- patients with hypertension and diabetes,
- patients with hypertension and other concurrent CVDs, and
- patients with hypertension without other compelling indications (previously known as uncomplicated hypertension).

Implications of the ALLHAT study are reflected in the 2003 recommendations by changes in wording related to choice of first-line therapy (increasing the prominence of thiazide diuretics), a recommendation *not* to consider angiotensin-converting enzyme (ACE) inhibitors as first-line therapy for black hypertensive patients without other compelling indications (reflecting the fact that ACE inhibitors are less effective in black people), and a recommendation to consider diuretics as a safe alternative to ACE inhibitors and angiotensin receptor blockers (ARBs) for hypertensive patients with diabetes but *normal* urinary albumin excretion.

Results of the LIFE trial[5] also affected our deliberations substantially. Its implications were reflected in recommendations to consider ARBs as an additional option for first-line therapy for younger patients, along with thiazide diuretics, β-blockers, dihydropyridine calcium channel blockers (CCBs), and ACE inhibitors; to use ARBs as first-line treatment of isolated systolic hypertension, along with diuretics and dihydropyridine CCBs; and in development of more specific recommendations for preferred first-line therapies for hypertensive patients with left ventricular hypertrophy (preferred therapies followed recommendations for treating "hypertension in patients with no other compelling indications").

Recommendations for managing hypertension in diabetic patients were simplified: **ACE inhibitors or ARBs were recommended as first-line therapy for all diabetic patients with hypertension.** This revision was based on consideration of diabetic subgroup analyses in the LIFE trial and ongoing discussions of the 2001 trials (ie, the Angiotensin II Antagonist Losartan trial [RENAAL][7] and the Irbesartan in Diabetic Nephropathy Trial [IDNT][8]) that established the renoprotective effect of ARBs.

What's the same for 2003 but still important?

- Management of hypertension should be individualized based on overall global atherosclerotic risk and target BP.
- Lifestyle modifications remain a cornerstone of antihypertensive therapy.
- The role of combination therapy remains critical in hypertension control.
- Establishing and maintaining patient adherence and compliance and dealing with convergence or concordance with antihypertensive management remains an important issue. Attention to some simple approaches can improve patient compliance (**Table 2**).

Table 2. Recommendations to improve adherence to antihypertensive prescriptions: *Adherence can be improved by a multipronged approach.*

Simplify medication regimens to once-daily dosing.
Tailor pill-taking to fit patients' daily habits.
Encourage greater patient responsibility and autonomy in blood pressure management (including home monitoring).
Educate patients and families about their disease and treatment regimens.

In some ways more important than "what's new" in the 2003 recommendations is "what has stayed the same." Hypertension remains a serious public health problem, and many issues in management of hypertension in 2002 remain in 2003. Ways to control hypertension and reduce CVD are known and available. What is missing is family physicians' implementation of the recommendations in practice.

Full text and further information on the 2003 Canadian Hypertension Recommendations can be found on the Canadian Library of Family Medicine website at **www.uwo.ca/fammed/clfm/clinica.html#25.**

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