

2001 Canadian Hypertension Recommendations

We believe that there is an error in the 2001 Canadian Hypertension Recommendations that were published in a recent issue of *CJHP*.¹ The Notes and Cautions section of Table 6, for "Renal disease," recommends to "give ACE [angiotensin-converting enzyme] inhibitors if patient has bilateral renal artery stenosis." We believe that this should state "cautious use" or "avoid" ACE inhibitors in patients with this condition. In some patients with renal artery stenosis, the hypertension is mediated by renin, and therefore ACE inhibitors are used. However, there is always the risk of precipitating acute renal failure and therefore, for the most part, they should probably be avoided in these patients.

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Reference

1. Canadian Hypertension Recommendations Working Group. The 2001 Canadian Hypertension Recommendations: What's new and what's not so new but is still important. *Can J Hosp Pharm* 2002;55:46-51.

Reply

Ms Leung and Dr Yamashita raise a good point. The strength of the evidence used in producing the recommendation and in addressing the question is low (grade D). Therefore, better research is required.

It is not possible to expand on all issues in a summary such as this one. However, the table is not in error. In unilateral renal artery stenosis, the hypertension is renin-dependent. In this setting, an ACE inhibitor is highly effective at reducing blood pressure and is frequently required for blood pressure control if the selected therapy is medical. The risk of renal failure in this setting is low, as the contralateral kidney is still functional. However, failure to control blood pressure over a long period will result in damage to the kidney without stenosis. In patients with bilateral renal artery stenosis and those with a solitary kidney and renal artery stenosis, the hypertension is volume-dependent. However, use of an ACE inhibitor or angiotensin receptor blocker can still cause renal failure. This is particularly dangerous if a diuretic causes volume depletion, where the hypertension and renal function become renin-dependent. In all patients with an increased likelihood of bilateral renal artery stenosis or a solitary kidney with suspected stenosis, caution (hopefully coupled with appropriate investigation) is required before an ACE inhibitor or an angiotensin receptor blocker is prescribed.

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