tions such as ACE inhibitors for diabetic nephropathy would be provided free to all Canadians.

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Access to the morning-after pill in BC

The primary goal of the BC emergency postcoital contraception initiative, which was discussed in a recent *CMAJ* article,[1] is to increase the availability of this important option for women's reproductive health. The resolution of the Society of Obstetricians and Gynaecologists of Canada calling for increased access to emergency postcoital contraception prompted the College of Pharmacists of BC to consider the situation in our province. It was clear that more work was needed to inform women about emergency postcoital contraception and to make it more accessible. Pharmacists can play a vital role in making this happen because of their knowledge of drug therapy and their availability. The threats and violence against physicians who perform abortions serve as a reminder that extreme emotions are associated with issues of reproductive choice and that much more needs to be done to prevent unintended pregnancies.

The *CMAJ* article states that BC will be making Preven a schedule II medication.[1] The hormones for emergency contraception are classed as prescription drugs at the federal level. The provinces cannot change the classification of a drug from prescription to nonprescription by placing it in schedule II. Provincial authorities can, however, explore avenues for permitting pharmacists to dispense a prescription drug without a physician's prescription. One mechanism may be to work in collaboration with a physician. Another option is to create a pharmacists' prescribing schedule. The College of Pharmacists of BC has submitted a resolution to the provincial government calling for the creation of schedule IV. The only drugs in the schedule would be the hormones for emergency contraception. By approving schedule IV, the provincial government would grant pharmacists independent prescribing authority for these products only.

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What exactly are we treating with the morning-after pill?[1] The absence of any medical facts is obvious. The morning-after pill is really an abortion pill. The joining of the sperm and the ovum in the fallopian tubes creates the beginning of a life. All of the DNA that we will require for the rest of our lives is present at that first moment. After that, only the amount of dependency on our parents decreases with time. The morning-after pill prevents the implantation of a unique human individual, tiny but unique and genetically complete.

Is it any wonder that some pharmacists are objecting on ethical grounds? They don't want to see themselves as abortionists. Who can blame them? Let's stick to the facts. Rhetoric about providing a service and reducing violence against physicians obscures the fact that this pill is ending a unique individual's life.

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Managing hypertension in patients with renal disease and diabetes

I congratulate the authors of the 1999 Canadian recommendations for the management of hypertension[1] for their diligent work, but question the recommendations regarding hypertensive patients with diabetic and nondiabetic renal disease. Ample evidence exists to support the use of angiotensin-converting-enzyme (ACE) inhibitors as first-line agents in both of these circumstances, but the selection of dihydropyridine calcium-channel blockers as an alternative therapy for nondiabetic renal disease and the lack of a recommendation for the use of nondihydropyridines in diabetic nephropathy are questionable.

A number of well-designed studies

have demonstrated that the reduction of proteinuria and preservation of renal function by nondihydropyridines, particularly verapamil, is similar to that by ACE inhibitors in diabetic nephropathy.[2–4] These studies further indicate that the reduction of proteinuria by nondihydropyridines is additive to the effect of ACE inhibitors.

In contrast, studies using dihydropyridines have failed to demonstrate a benefit with regard to proteinuria or renal function unless systolic blood pressure is reduced below 110 mm Hg.[5] Furthermore, several trials have demonstrated a renal hazard associated with the use of dihydropyridines in diabetic nephropathy and other situations. Isradipine was associated with a 50% increase in proteinuria in African Americans with diabetic nephropathy.[6] In the PRAISE trial 7.7% of subjects randomized to receive amlodipine had worsening renal function compared with 3.6% in the placebo group.[7]

The guidelines cite studies by Bianchi and colleagues and Zucchelli and colleagues in support of the recommendation for the use of dihydropyridines in nondiabetic renal failure.[8,9] Although in these 2 studies an ACE inhibitor and a dihydropyridine produced similar changes in renal function, the effects with respect to proteinuria and renal death were significantly better with the ACE inhibitor.

Loss of renal autoregulation has been suggested as one mechanism for the unfavourable effects seen with the dihydropyridines.[10] Because nondihydropyridine calcium-channel blockers do not impair renal autoregulation,[11] have a favourable effect on glomerular permeability and have been demonstrated to be renal protective in clinical studies previously cited, they may be a better choice as an alternative therapy in diabetic and nondiabetic nephropathy and perhaps in all diabetic patients with hypertension.

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Competing interests: Dr. Bell serves as a medical consultant to Searle Canada; he has received speaker fees and travel assistance grants.

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The authors of the 1999 Canadian recommendations for the management of hypertension state that "hypertension in people with diabetes should be treated to obtain target blood pressure lower than 130/80 mm Hg."[1] This grade C recommendation is supported by evidence from the HOT[2] and UKPDS 38[3] studies insofar as the diastolic target is concerned. However, we question the systolic target of 130 mm Hg given our review of the evidence from these 2 studies.

In the HOT study, the mean systolic blood pressure achieved by the group randomized to a diastolic target of < 80 mm Hg was 139.7 mm Hg. In the UKPDS 38 study, the mean systolic blood pressure achieved in the group randomized to "tight" blood pressure control was 144 mm Hg. Therefore, the evidence with regard to the systolic target for control of blood pressure in diabetic patients with hypertension points to 140 mm Hg rather than 130 mm Hg less.

The high prevalence of systolic blood pressures in the range of 130 to 140 mm Hg would mandate additional treatment for a large number of people if the Canadian guidelines were to be closely followed. Of note, the British Hypertension Society recommends that clinicians attempt to achieve a target of less than 140 mm Hg systolic blood pressure in hypertensive patients with type II diabeties.[4] Is there additional evidence

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that led the authors to recommend a lower systolic target of 130 mm Hg?

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[Three of the authors respond:]

The correspondents have raised issues that were discussed during the course of our deliberations as we developed the recommendations.

Alan Bell questions the recommendations for treatment of patients with hypertension and renal disease especially regarding the role of nondihydropyridine calcium-channel blockers. Both in the treatment recommendations for hypertensive patients with renal disease as well as in the other recommendations, the primary basis for designating specific drugs as first-line therapy was effective reduction not only of blood pressure but also of the ultimate end points, namely rates of hypertension-related cardiovascular complications. Thus, the designation of ACE inhibitors as first-line therapy for hypertensive patients with renal disease was based on evidence that these drugs are effective in reducing the development of renal failure and renal complications (beyond surrogate end points such as serum creatinine levels and proteinuria).[1] As Bell points out, advantages of nondihydropyridine calcium-channel blockers over dihydropyridine calcium-channel blockers may have been demonstrated in the context of measures of renal hemodynamics or proteinuria. However, the lack of head-to-head comparisons between ACE inhibitors and a nondihydropyridine calcium-channel blocker in "hard outcome" studies was the primary basis for not including them for this indication. With the conclusion of the recent spate of megatrials (including those assessing the effects of nondihydropyridine calcium-channel blockers on hard end points) a more definitive recommendation regarding this class of drugs in patients with renal insufficiency might be anticipated. Apropos, we have organized a process to continuously review the hypertension literature and update all of our hypertension recommendations. Recognizing the poor uptake of recommendations in clinical practice, we have also linked this recommendations development process to a formal implementation plan coordinated by Health Canada and including a range of stakeholders involved in hypertension management.

Roland Grad and Stephen Hanley raise a thoughtful question regarding the basis of the recommendation for a target blood pressure of less than 130/80 mm Hg for patients with hypertension and diabetes. As they identify, the main impetus for the target for diastolic blood pressure of < 80 mm Hg was the diabetic subgroup of the HOT study.[2] The grade C ascription was based on the diastolic blood pressure recommendation. The systolic target of 130 mm Hg was based on extrapolation from several sources. For the large subgroup of diabetic patients with some degree of nephropathy the target was based on studies of the greater population of patients with renal insufficiency for whom a mean arterial pressure target of 98 mm Hg (130/80 mm Hg) has been shown to be associated with a reduced decline in glomerular filtration rate and renal complications.[1] Studies such as HOPE[3] have reinforced the concept that for those patients at highest risk for atherosclerotic complications, blood pressure reduction even within the range nominally considered as normal (although epidemiologically associated with incremental risk for blood pressure related complications) would result in appreciable reductions in event rates. Parenthetically, this target for systolic blood pressure is consistent with that recommended by the World Health Organization – International Society of Hyptertension[4] as well as the US Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure.[5]

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