

Hypertension in pregnancy: new recommendations for management

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Résumé

LA PUBLICATION, QUI COMMENCE AVEC LE PRÉSENT NUMÉRO (page 715), de l'énoncé consensuel en 3 parties de la Société canadienne d'hypertension artérielle au sujet du traitement de l'hypertension gravidique répond à un besoin connu depuis longtemps de recommandations diagnostiques et thérapeutiques dans ce domaine de la médecine. Il est difficile de dégager des consensus dans ce domaine, parce qu'il n'y a pas de modèle animal pouvant servir à l'étude de l'hypertension gravidique et qu'il est difficile, sur le plan éthique, d'effectuer des études contrôlées prospectives mettant en cause des femmes enceintes. Les auteurs de la déclaration consensuelle ont néanmoins réussi à fournir aux professionnels de la santé du Canada des définitions claires et des suggestions thérapeutiques utiles.

The publication, beginning in this issue (page 715), of the 3-part consensus statement from the Canadian Hypertension Society (CHS) on the management of hypertension in pregnancy fulfils a long-recognized need for diagnostic and therapeutic recommendations in this area of medicine. The CHS consensus conferences¹⁻³ have become widely recognized for their objectivity and quality. This is largely because they develop agreement from the objective evaluation of available evidence, following the criteria initially formulated by the Evidence-Based Medicine Working Group at McMaster University in Hamilton, Ont. This method not only provides an appropriate way to develop recommendations but also allows readers to consider the strength of the evidence on which those recommendations are based. Naturally, in areas of uncertainty or where there is no evidence, recommendations must be based on opinion, or grade D evidence. But when the quality of evidence is made explicit, as in the CHS consensus statement, physicians and other users of the guidelines can make well informed decisions about their implementation.

The management of hypertension in pregnancy is a difficult area in which to build consensus, given the ethical difficulty of conducting prospective controlled trials of treatments that affect both the mother and her fetus. Nevertheless, there was a need to evaluate the existing literature and to provide enlightened recommendations for use in Canada and elsewhere. The authors have succeeded in doing so, and have also drawn comparisons with the recommendations of parallel groups in other countries, particularly Australia and the US.

In an area in which solid information is lacking, it is understandable that readers may note slight discrepancies between the 3 parts of the consensus statement. For example, hypertension is defined in part 1 on the basis of diastolic blood pressure only, whereas in parts 2 and 3 clinical decisions regarding pharmacologic and nonpharmacologic management are based on systolic as well as diastolic blood pressure. Issues that go beyond hypertensive disorders in pregnancy, such as hypertension that continues after delivery, are mentioned only briefly in the consensus statement. Future guidelines should be developed as to the specifics of follow-up. Should microalbuminuria detection, which may predict future hypertension, be recommended? If so, when? Further guidance is also needed on the specifics of pharmacotherapy and its continuation after delivery. Readers should bear in mind that the grading of a recommendation, which is based on the quality of evidence, does not necessarily reflect the degree of effectiveness of an intervention. For example, the recommendations for calcium and fish oil supplementation



Editorial

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‡ See related article page 715



are both graded B. However, the several randomized controlled trials that evaluated calcium supplementation provided evidence of a sizable reduction in relative risk of hypertension complications (over 50%), whereas the fewer number of trials that evaluated fish oil supplementation found only a marginal decrease in relative risk. Physicians using these guidelines should refer to the tables indicating the impact on risk reduction of the various interventions evaluated.⁴

Nonpharmacologic management is presented in part 2 of the consensus statement as the recommended approach in mild hypertension. Unfortunately, the authors do not make it clear that at least some nonpharmacologic therapies can be used as an adjunct to drug therapy in more severe hypertension. In part 3, pharmacotherapy is carefully laid out and presented in a useful form for physicians. In a departure from guidelines in some other countries, the recommendations do not suggest that diuretic therapy be avoided in pregnancy altogether, but only that it be limited to specific indications. The most important difference from the management of hypertension in other patient groups^{3,5} is that the so-called old medications, with the exception of calcium-channel blockers, are clearly preferred in pregnancy. In part, this stems from the lack of evaluation of newer agents and from the fact that the biologic effects of some of the newer agents (e.g., angiotensin-converting enzyme inhibitors) are incompatible with pregnancy.

The CHS consensus statement should provide Canadian health care professionals with clear definitions and useful therapeutic suggestions in the management of hy-

pertension in pregnancy. Clearly, more research is needed in this area, in which progress has been hampered by the lack of an animal model. The animal models presently available allow only for the study of pre-existent hypertension, which, as in humans, is in fact attenuated by pregnancy. Researchers involved in this area should be

commended for the progress they have made in spite of such difficulties. It is hoped that the publication and application of these guidelines will benefit pregnant women and their fetuses and will further clinical and scientific development in this important area of health care.

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