

Hypertension – Antihypertensive Medication Adjustment and Monitoring

English summary

Une production de l'Institut national
d'excellence en santé
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SUMMARY

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Introduction

In Quebec, hypertension affects nearly 20% of individuals aged 20 and older, representing more than 1.6 million individuals. If left untreated, this chronic condition increases the risk of cardiovascular disease, stroke, and chronic kidney disease. It is therefore essential to ensure optimal care for individuals with hypertension.

Several clinical practice guidelines, including those of Hypertension Canada, have recently been updated. These updates have led to important changes in the definition of hypertension and its pharmacological management, including the recommendation to initiate treatment with a combination of two antihypertensive drug classes from the outset. The Institut national d'excellence en santé et en services sociaux (INESSS) has updated its National Medical Protocol (NMP) along with the associated collective prescription and tutorial.

Method

A systematic review of clinical practice guidelines, guideline documents, and other publications with recommendations on the management of individuals with hypertension was conducted in accordance with the Institute's standard methods. The evidence was analyzed and contextualized in Quebec clinical practice with input from an advisory committee of Quebec clinicians with expertise in the treatment and monitoring of hypertension. Quebec-specific legislative, regulatory and organizational considerations were also considered. A brief economic analysis was conducted to assess the potential budgetary impact of the updated clinical practice guidelines on Quebec's public drug insurance plan. In addition, individuals receiving antihypertensive therapy were consulted to identify the information most relevant to communicate during follow-up visits. Finally, the overall quality, acceptability and applicability of the work were assessed by external reviewers with expertise in the field, as well as by prospective end users who had not participated in its development.

Results

Following the analysis of all the evidence gathered and the iterative consultation process with the advisory committee, the following findings and key messages were identified as key to supporting the harmonization of clinical practice and strengthening health professionals' capacity to manage the care of individuals with hypertension.

Adopting and Maintaining Healthy Lifestyle Habits: A Cornerstone of Blood Pressure Control

The adoption and maintenance of healthy lifestyle habits constitute a cornerstone in the management of hypertension, both as a preventive measure and as an adjunct to

pharmacological treatment. Monitoring lifestyle habits is therefore emphasized in the NMP at every stage of monitoring antihypertensive medication adjustment, with specific examples of elements to be monitored, namely:

- a diet rich in fruits and vegetables and low in salt;
- reduction or cessation of alcohol, nicotine, and drug use;
- increased physical activity;
- optimization of sleep (both quality and duration);
- stress reduction.

Timely Achievement of Therapeutic Targets: A Key Element in Hypertension Management

The need to overcome therapeutic inertia and achieve prompt blood pressure control was a key driver of the revisions to the clinical practice guidelines and has been reflected both in the NMP and the accompanying reference tool. The recommended blood pressure target have been further specified, along with the optimal timeframe for achieving it. Since most individuals with hypertension will require combination therapy to achieve optimal blood pressure control, the updated guidelines recommend initiating therapy with a combination of two antihypertensive drug classes from the outset. This change in therapeutic approach has been incorporated into the NMP through an updated medication adjustment framework which now include guidelines to support dose titration rather than stepwise dosing schedules for each individual medication. The list of included drugs has been revised, and spironolactone was added to the NMP to broaden its applicability. These changes are expected to support a standardized approach that aims at achieving therapeutic targets quickly. In addition, the frequency of lipid tests and fasting blood glucose has been reduced and harmonized with other INESSS recommendations.

A practice guide to promote best practices

The updated clinical practice guidelines are expected to increase the number of individuals diagnosed with hypertension. This increase could have a significant financial impact on Quebec's public drug insurance plan, particularly if the new recommendations are not appropriately followed, as not all individuals with hypertension require pharmacological treatment. To support appropriate prescribing of antihypertensive agents, INESSS has developed a reference tool for prescribers.

The key reminders considered relevant are:

- the new definition of hypertension established at 130/80 mm Hg;
- the importance of promoting the adoption and maintenance of healthy lifestyle habits within the therapeutic approach;
- appropriate indications for initiating pharmacological therapy;
- the recommended drug classes for initiating and adjusting pharmacotherapy;

- information to be provided to individuals with hypertension.

It is important to note that optimization of lifestyle habits alone is the recommended therapy for individuals without risk factors for high cardiovascular disease and with a systolic blood pressure between 130 and 139 mm Hg. In addition, beta-blockers are not recommended as first-line treatment for uncomplicated hypertension, but rather they are indicated for individuals with comorbidities.

Conclusions

This update of the NMP for antihypertensive medication adjustment, the associated collective prescription model for initiating diagnostic measures, and the development of a reference tool for primary care prescribers are based on clinical evidence from the guideline documents identified in the literature. This evidence was strengthened by the experiential knowledge of consulted stakeholders as well as by Quebec-specific contextual considerations. The integration of all evidence collected made it possible to determine whether content from the previous version should be maintained and adding any missing information where necessary. This update aims to optimize care for individuals with hypertension in the context of joint monitoring by primary care providers, thereby improving the care experience of individuals receiving antihypertensive treatment.

Update

The need to update the recommendations included in this NMP will be evaluated four years after the publication of this document, taking into account the evolution of scientific data, the introduction of new drug molecules, new fixed-dose combination therapies or new approaches to antihypertensive dose titration, and changes in the needs of the health and social services network.

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