

Achieving Optimal Blood Pressure Control: Does Your Initial Choice of Medication Matter?

Frequently Asked Questions About Hypertension

Q. In lowering BP, is there any benefit in using magnesium supplementation?

A. Probably not. However, calcium and magnesium are both important for bone health, and supplementation may be needed for patients taking diuretics, which can deplete these elements. Potassium can also become depleted, and patients can help prevent that from happening by consuming potassium-rich foods, such as bananas, melons, raisins, orange juice, and so forth. If, despite this dietary measure, patients experience muscle cramps or hypokalemia becomes evident on testing, it would be appropriate to add a potassium supplement or switch to a potassium-sparing diuretic.

Q. Several conditions can elevate CRP. How does one determine if an elevation is cardiac-related?

A. Patients with psoriasis, lupus, rheumatoid arthritis, respiratory or urinary tract infections will all have elevated CRP levels. In fact, noncardiac causes of inflammation are most suspect in anyone with a CRP level >10 mg/L. With high-sensitivity CRP (hs-CRP) measurement, a patient with dyslipidemia who has an hs-CRP of 2 to 4 mg/L and does not have inflammatory disorders is a candidate for lipid-lowering therapy. Below 2 mg/L, lifestyle modifications may be sufficient, unless of course LDL-C is at a hazardous level.

Q. Do JNC 7 guidelines advise use of hydralazine when hypertension is uncontrolled by other means?

A. If other available antihypertensive regimens have been exhausted, hydralazine is an option. Before taking that step, however, it would be prudent to explore possible explanations for treatment failure (eg, the patient is not adhering to therapy, presence of renovascular disease, hyperaldosteronism, or pheochromocytoma). At some point in trying different agents without success, a search for a secondary cause of hypertension is warranted.

Q. In reducing BP “quickly,” what time frame is implied?

A. Within 4 to 6 weeks of initiating treatment. Waiting a couple of months or so was once considered reasonable. That changed after the VALUE (Valsartan Antihypertensive Long-term Use Evaluation) trial.²⁶ In comparing a RAAS-based regimen with a CCB-based regimen, investigators chose a more potent dosage for the latter regimen (because these were the approved dosages at the time). That resulted in a more rapid BP response and greater decrease in CV morbidity and mortality within 4 to 6 weeks. This study led to a more aggressive approach in titrating doses and in choosing combination therapies earlier if it is apparent the patient will require that anyway.

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Q. When should consideration be given to renal artery stenosis?

A. Certain populations come to mind. Women younger than 25 years who suddenly have a dramatic elevation in BP and no family history of hypertension may have fibromuscular hyperplasia. Men or women in their 70s in whom severe hypertension develops when BP had been well controlled or when they had been normotensive have a greater likelihood of renal artery stenosis. This possibility should also be considered in any patient known to adhere to therapy in whom BP rises despite administration of 3 or 4 drugs at adequate doses.

Hyperaldosteronism is another diagnosis to keep in mind when an adherent patient is not doing well on a reasonable antihypertensive regimen. Normokalemic hyperaldosteronism is far more common than once believed and is suggested if testing shows suppression of renin and elevation of aldosterone. In this event, spironolactone or eplerenone could be effective treatment.

Q. Which antihypertensive medications interact with NSAIDs?

A. Traditional NSAIDs, ibuprofen and naproxen, reduce renal blood flow and lead to salt and water retention. Hypertensive patients should not take them long term because they can cause renal deterioration and increase BP. Using them for 2 or 3 days after overexertion is acceptable; celecoxib or aspirin would be better choices for long-term therapy because they do not raise BP.