New Rules for High Blood Pressure

In its sixth report, the Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure had a succinct message for doctors: complacency is hurting your patients.

Studies indicate that three-fourths of people with high blood pressure do not have it controlled, said Sheldon G. Sheps, MD, emeritus professor of medicine at the Mayo Clinic in Rochester, Minn, and chairman of the committee.

“One quarter of people with high blood pressure are controlled,” he said. “One quarter are on medication but not controlled. One half are not on medications at all,” he said.

“It’s important to point out that there are some signals that things are not going as well as we thought,” said Dr Sheps. “Not enough Americans are controlling their high blood pressures. Related diseases are not declining as they have in the past. These things signal the need to renew our efforts to control and prevent high blood pressure.”

But if the panel had a warning for doctors, it also heeded a previous call from physicians that the new report should be easy to read, straightforward, and specific as to what the committee was recommending. Dr Sheps said the committee tried to meet all these requirements while offering an aggressive new plan for the control of high blood pressure in stratified population groups with specific risk factors.

The picture for high blood pressure control was good from 1976-1991. In 1988-1991 (the period of the National Health and Nutrition Examination Survey III, phase I), 73% of people with high blood pressure knew of their condition compared to only 51% in 1976-1980 (NHANES II). Fifty-five percent were under treatment in the NHANES III, phase 1 study period, as compared to only 31% in NHANES II. And 29% of those in the latter period had their blood pressure controlled to $\leq 140/90$ mm Hg, compared to only 10% in the earlier group.

But by 1991-1994, phase II of NHANES III, the picture had begun to get bleaker. Only 68.4% of patients knew of their diagnosis, only 53.6% were receiving treatment, and only 27.4% had their hypertension under control.

The committee estimated that if previous increases had continued, the trend established between 1976-1980 and 1988-1991, there would have been an increase in 1991-1994 in awareness to 76.2%, in treatment to 59.6%, and in control to 31.2% instead of the levels shown in Table 1.

Associated with these changes have been age-adjusted increases in stroke rates. The decline in age-adjusted coronary heart disease is leveling off.

The rates of end-stage renal disease have also increased during that period, as has the prevalence of heart failure.

Dr Sheps noted that the new treatment guidelines refer to three stages of hypertension and three stages of risk factors as a matrix against which physicians can determine therapy. Along with the recognition of high normal blood pressure as problematic, those are the new elements of the report that he described as “succinct and user-friendly.”

“These new guidelines offer aggressive new strategies to improve the effectiveness of high blood pressure treatment,” said Dr Sheps. The strategies are based on a patient’s risk status as determined by blood pressure and co-existing risk factors, he said.

Health care providers said they wanted something contemporary and succinct, said Dr Sheps. “If someone wants to stick something up on the wall that says what I do, then that’s all right.”

For example, high normal blood pressure of between 130-139/85-89 mm Hg is included in the risk stratification. In patients with high normal blood pressure with no or only one concurrent risk factor that does not include diabetes, target organ, or clinical cardiac disease, the guidelines suggest lifestyle modification to lower blood pressure even further. But with a risk factor of target organ or clinical cardiac disease, diabetes and/or other risk factors, the guidelines recommend drug therapy, no matter what the patient’s blood pressure is.

Patients with stage 1 blood pressures of between 140-159/90-99 mm Hg who have no other risk factors should try lifestyle modifications for a year before drug therapy is used. But if these patients have one risk factor other than diabetes, target organ, or clinical cardiac disease, their lifestyle modification should be tried for only 6 months before initiation therapy.

For patients with blood pressure above 150/100 mm Hg, drug therapy is recommended, no matter what the patients’ risk factors.

The report notes that most patients with diagnosed hypertension do not make lifestyle changes or take enough medication to achieve control. The report suggests lifestyle modifications involving diet, weight reduction, moderation in alcohol and sodium intake, and regular exercise for people with high blood pressure, including those who are working to reduce pressure without medications and those taking medications.

When medication is considered, the panel recommended that doctors consider cost. It recommended generic formulations and advising patients to check prices at different sources of the drugs. Physicians should start with lowest recommended doses and go up from there.

Dr Sheps said addressing the cost issues was important. “We wanted to give physicians ways to reduce costs by recommending generic drugs and lower doses,” he said.

For the first time, the panel recommended classes of drugs for specific comorbidities, such as ACE inhibitors for Type 1 diabetes with proteinuria, or ACE inhibitors and diuretics for heart failure.

Norman Kaplan, MD, of the University of Texas Southwestern Medical School in Dallas, called the suggestions “compelling indicators.” He said that while one has to consider the competing indicators, doctors should be innovative and work to achieve blood pressure control. “If the goal is not reached, change the drug or add more drugs to it. Consider referring the patient to a hypertension specialist,” he said.
Being aware of the special needs of special populations such as children and women and minority groups is key in high blood pressure control, said Keith Ferdinand, MD, of Heartbeats Life Center in New Orleans. For example, African-Americans with high rates of high blood pressure also have more end-stage renal disease, stroke, and myocardial infarction, he said. When high blood pressure is detected in a child, physicians should look carefully for a cause, he said.

“The main message we want to get out is ‘Get your blood pressure controlled,’” said Dr Sheps. “Don’t be satisfied if your blood pressure is not controlled.”

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