What is adequate hypertension control?

(OCTOBER 2007)

TO THE EDITOR: In his review of adequate hypertension control, Dr. Graves speaks to the problem of systolic hypertension in the elderly and laments that "only 30% of general practitioners, 38% of internists, and 58% of cardiologists were willing to treat to the aggressive targets outlined in the JNC 7 [seventh Joint National Committee] guidelines."[1] Isolated systolic hypertension in the elderly has also been recently addressed in another prestigious journal,[2] in agreement with Dr. Graves' position.

Why would knowledgeable and caring physicians be unwilling to follow the "less-than-140/90" recommendation of experts? Indeed, why do the British,[3] who have access to the same studies, think that using less than 160/100 is sometimes acceptable? I would submit that reasons for our "unwillingness" are the very points explicitly stated in these two articles.

Systolic hypertension is a condition that more than 90% of everybody will get if they live long enough. About 66% of everybody will get it by age 60. It is, for the most part, a consequence of aging. Factors reducing adherence to treatment include complex dosing regimens and cost. Two-thirds of these 90%-of-everybody patients will require two or more drugs to relieve their condition. Lowering blood pressure to less than 140/90 mm Hg with antihypertensive drugs is safe, effective, and achievable in up to 60% of hypertensive patients younger than 80 years. Some evidence suggests, however, that beyond a certain age (80 years), the treatment may do more harm than good. For those over 60 with systolic pressures between 140 and 159 mm Hg, no interventional studies have been done to show that treatment does more good than harm.

In this era of evidence-based guidelines (wherein a patient with five common afflictions would be prescribed 12 medicines costing $406 per month[4]), might treatment of isolated hypertension in this "over-60/under-160" multitude be appropriately described as flying by the seat of our pants, or perhaps as non-evidence-based medicine? Is it really so outrageous that only 58% of cardiologists are willing to aggressively push toward a goal that is safely achievable no more than 60% of the time? In our zeal to undo this human condition, are we confusing normal with ideal?

Perhaps when knowledgeable and caring primary care providers "in the trenches" fail to follow recommendations by experts, the problem deserves another look, and what seems like poor performance at first may not be so outrageous after all.

DAVID D. NORENBERG, MD
Gundersen Clinic
La Crosse, WI

REFERENCES

1. **Graves JW.** What is adequate hypertension control? Having your dinner and desert too. Cleve Clin J Med 2007; 74:748–754.
2. **Chobanian AV.** Isolated systolic hypertension in the elderly. N Engl J Med 2007; 357:789–796.
3. **Williams B, Poulter NR, Brown MJ, et al; British Hypertension Society.** Guidelines for management of hypertension: report of the fourth working party of the British Hypertension Society. J Hum Hypertens 2004; 18:139–185.
4. **Boyd CM, Darer J, Boult C, Fried LP, Boult L, Wu AW.** Clinical practice guidelines and quality of care for older patients with multiple comorbid diseases: implications for pay for performance. JAMA 2005; 294:716–724.

IN REPLY: I would like to thank Dr. Norenberg for his interest in my recent article in the Cleveland Clinic Journal of Medicine,[1] but I am afraid I must respectfully disagree with most of his premises. First, there are numerous prospective trials confirming the efficacy of treatment of all forms of systolic hypertension in the elderly.[2–6] It is upon this considerable body of evidence that the treatment guidelines from the major hypertension societies are based.[7–10] Dr. Norenberg acknowledges the information I presented about the contrarian view of hypertension treatment presented by the British Hypertension Society (BHS).[7] A more careful evaluation of the BHS conclusions, however, reveals that the treatment threshold of 160/100 mm Hg is for the very small group of patients without any other cardiovascular risk factors. The BHS comes back to the same treatment targets in the population Dr. Norenberg describes in his

letter, ie, older patients with systolic hypertension, as they almost universally have concomitant cardiovascular risk factors such as dyslipidemia, diabetes, or known atherosclerosis obliterans.

However, the most important point that Dr. Norenberg's letter raises is why physicians would be unwilling to follow the less-than-140/90 recommendations of experts. I have previously written about this very topic.[11] The primary issues seem to be the rapid evolution of the guidelines due to multiple clinical trials of hypertension, fear of medication side effects, and loss of focus on the importance of systolic blood pressure in favor of focusing on the unique benefits of certain classes of antihypertensive therapy (the "dessert" in my article[1]). This failure of change in physician behavior regarding adherence to evidence-based guidelines has led to increased oversight not only of errors in medical care, but also of performance, with measures of performance increasingly being available on the World Wide Web.[12] Since society has judged that we physicians are too slow to adapt to evidence-based guidelines for quality of care, as illustrated by Dr. Norenberg's letter, we will now increasingly see "pay for performance" by Medicare and other providers.[13]

I end with the main point to be derived from Dr. Norenberg's letter and my article, which is what I would term "financial adaptive evolution in health care"—we either follow the guidelines or we will not be paid! That societal demands for improved health care have to be achieved in this punitive fashion should be an epiphany to all of us who are in pursuit of the best care for our patients.

JOHN W. GRAVES, MD
Mayo Clinic
Rochester, MN

REFERENCES

1. **Graves JW.** What is adequate hypertension control? Having your dinner and desert too. Cleve Clin J Med 2007; 74:748–754.
2. **Amery A, Birkenhäger WH, Brixko P, et al.** Mortality and morbidity results from the European Working Party on High Blood Pressure in the Elderly trial. Lancet 1985; 1:1349–1354.
3. **Coope J, Warrender TS.** Randomised trial of treatment of hypertension in elderly patients in primary care. BMJ 1986; 293:1145–1151.
4. **Dahlöf B, Lindholm LH, Hansson L, Scherstén B, Ekbom T, Wester PO.** Morbidity and mortality in the Swedish Trial in Old Patients with Hypertension (STOP-Hypertension). Lancet 1991; 338:1281–1285.
5. **SHEP Cooperative Research Group.** Prevention of stroke by antihypertensive drug treatment in older persons with isolated systolic hypertension. Final results of the Systolic Hypertension in the Elderly Program (SHEP). JAMA 1991; 265:3255–3264.
6. **Medical Research Council Working Party.** Medical Research Council trial of treatment of hypertension in older adults: principal results. BMJ 1992; 304:405–412.
7. **Williams B, Poulter NR, Brown MJ, et al; British Hypertension Society.** Guidelines for management of hypertension: report of the fourth working party of the British Hypertension Society. J Hum Hypertens 2004; 18:139–185.
8. **Khan NA, McAlister FA, Rabkin SW, et al; Canadian Hypertension Education Program.** The 2006 Canadian Hypertension Education Program recommendations for the management of hypertension: part II—therapy. Can J Cardiol 2006; 22:583–593.
9. **Chobanian AV, Bakris GL, Black HR, et al; National High Blood Pressure Education Program Coordinating Committee.** The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure: the JNC 7 report. JAMA 2003; 289:2560–2572.
10. **Mancia G, De Backer G, Dominiczak A, et al; the Task Force for the Management of Arterial Hypertension of the European Society of Hypertension and the European Society of Cardiology.** 2007 guidelines for the management of arterial hypertension. J Hypertens 2007; 25:1105–1187.
11. **Graves J, Sheps S.** Seniors and systolic hypertension: an unanswered call to arms. Chest 2001; 119:323–327.
12. **US Department of Health and Human Services.** Quality initiatives—general information. www.cms.hhs.gov/QualityInitiativesGenInfo/. Accessed 11/07/2007.
13. **US Department of Health and Human Services.** Medicare "pay for performance" (P4P) initiatives. www.cms.hhs.gov/apps/media/press/release.asp?Counter=1343. Accessed 11/07/2007.