

SUGGESTED READING

Kahn JO, Lagakos SW, Richman DD, et al. A controlled trial comparing continued zidovudine with didanosine in human immunodeficiency virus infection. *N Engl J Med* 1992; 327:581-587.

McLeod GX, Hammer SM. Zidovudine: five years later. *Ann Intern Med* 1992; 117:487-501.

Meng TC, Fischl M, Boota AM, et al. Combination therapy with zidovudine and dideoxycytidine in patients with advanced human immunodeficiency virus infection. *Ann Intern Med* 1992; 116:13-20.

Pantaleo G, Graziosi C, Fauci AS. New concepts in the immunopathogenesis of human immunodeficiency virus infection. *N Engl J Med* 1993; 328:327-335.

TREATING HYPERTENSION IN OLDER PATIENTS: SPECIAL CONSIDERATIONS

In patients 55 and older, the value of treating hypertension is now well established, regardless of race, sex, and blood pressure subgroups. There are, however, certain considerations to keep in mind when embarking on a course of antihypertensive drug therapy in an older patient.

In general, older patients tolerate active treatment well. For example, diuretics and beta blockers, when started in low doses, are safe and effective. The initial goal of therapy is to bring the systolic pressure down to less than 160 mm Hg in those whose pressure is over 180 mm Hg at the outset, and to lower the pressure by 20 mm Hg in those whose pressure is between 160 and 179. When isolated systolic blood pressure is 140 to 160, life-style modifications may be considered as either adjunctive or definitive therapy. If these lower pressures are well tolerated, it may be appropriate to reduce the blood pressure even further.

The goal of therapy for diastolic hypertension in older patients is similar to that of the general population, ie, less than 90 mm Hg.

POTENTIAL OBSTACLES TO TREATMENT

Certain physiologic changes occur with aging and should be considered when planning antihyperten-

sive drug therapy in the elderly. With age, cardiac output falls, whereas total peripheral resistance rises and blood volume contracts. Renal and hepatic function falls off and the autonomic nervous system, particularly the baroreceptors, show a diminished response. There is a progressive loss of autonomic neurons with aging.

Pharmacodynamic profiles of antihypertensive drugs are different in the elderly because of diminished gastric emptying, decreased liver blood flow, a lower concentration of serum albumin, and a relative increase in body fat. These alterations can contribute to more drug-drug interactions and more side effects unless dosing is reduced appropriately. Concomitant disease such as diabetes, degenerative arthritis, congestive heart failure, coronary artery disease, cerebral and peripheral vascular disease, bronchospastic disorders, gout, and diminishing mental acuity are obstacles to the success of any drug program.

The overriding maxim for antihypertensive drug therapy remains "start low, go slow." In addition, always measure blood pressure in the standing and seated (or supine) positions. Antihypertensive drug therapy may exacerbate postprandial hypotension.

As the aggressive marketing of newer antihypertensive agents continues, it is important to keep in mind that, while all classes of antihypertensive drugs have been shown to be effective in lowering blood pressure in older patients, only diuretics and beta blockers have been used in controlled trials that have shown a reduction in cardiovascular morbidity and mortality.

SHELDON G. SHEPS, MD
Division of Hypertension and Internal Medicine
Mayo Clinic Medical School
Rochester, Minn

SUGGESTED READING

The fifth report of the Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure. *Arch Intern Med* 1993; 153:154-183.