Time Trends in High Blood Pressure Control and the Use of Antihypertensive Medications in Older Adults

The Cardiovascular Health Study

The awareness, treatment, and control of high blood pressure (BP) improved during the 1990s in whites and blacks. The control of high BP to less than 140/90 mm Hg increased from 37% at baseline to 49% in 1999. Improved control was also achieved in part by increasing the proportion of the entire Cardiovascular Health Study cohort that was treated for hypertension from 34.5% in 1990 to 51.1% in 1999. The 51% whose BP was not controlled generally had isolated mild to moderate elevations in systolic BP. Time trends in antihypertensive drug use were pronounced. Among those without coronary disease, for instance, the use of low-dose diuretics and β-blockers decreased, while the use of newer agents, such as calcium channel blockers, angiotensin-converting enzyme inhibitors, and α-blockers, increased. Low-dose diuretics and β-blockers—the preferred agents since 1993 according to the US national recommendations—remained underutilized. More widespread use of these agents will be an important intervention to prevent the devastating complications of hypertension, including stroke, myocardial infarction, and heart failure.

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Prevalence, Expenditures, and Complications of Multiple Chronic Conditions in the Elderly

In 1999, 82% of aged Medicare beneficiaries had 1 or more chronic conditions, and 65% had multiple chronic conditions. Beneficiaries with 2 or more chronic conditions incurred 95% of all Medicare expenditures. Inpatient admissions for ambulatory care sensitive conditions and hospitalizations with preventable complications increased with the number of chronic conditions. For example, Medicare beneficiaries with 4 or more chronic conditions were 99 times (95% confidence interval, 86-113) more likely to have an admission for an ambulatory care sensitive condition than a beneficiary without any chronic conditions. Better primary care, especially coordination of care, could reduce avoidable hospitalization rates, especially for individuals with multiple chronic conditions.

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Predictive Value of Clinic and Ambulatory Heart Rate for Mortality in Elderly Subjects With Systolic Hypertension

The predictive value of clinic and ambulatory heart rate for mortality was assessed in a cohort of elderly subjects with isolated systolic hypertension from the Systolic Hypertension in Europe Trial. After adjusting for several confounders, raised baseline clinic heart rate was associated with a worse prognosis for total, cardiovascular, and noncardiovascular mortality among the 2293 men and women taking placebo. In a Cox regression analysis including clinic and ambulatory heart rates (n=393), ambulatory heart rate did not add any prognostic information to that provided by clinic heart rate. Palatini et al concluded that in untreated older patients with isolated systolic hypertension, a clinic heart rate greater than 79 beats/min was a significant predictor of all-cause, cardiovascular, and noncardiovascular mortality.

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Osteoporosis and Fractures in Postmenopausal Women Using Estrogen

To determine long-term probabilities for incident fractures among postmenopausal estrogen users, Nelson et al examined data from the Study of Osteoporotic Fractures, a prospective cohort study with 10 years of follow-up (1986-1999). This cohort includes 8816 women 65 years and older from community settings in 4 areas of the United States. Although results indicate that estrogen use is associated with reduced prevalence of low bone density, less bone loss, and lower probabilities for fractures, osteoporosis and fractures are common in older women who used estrogen continuously since menopause, as well as for those using it for less time. Estrogen users should be considered in strategies designed to detect, prevent, and treat osteoporosis.

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