Drug-Related Deaths in a Department of Internal Medicine

In a 2-year study it was found that 18.2% of the patients who died in a department of internal medicine suffered fatal adverse drug events (9.5 per 1000 hospitalized patients). Patients who had fatal adverse drug events used more drugs and had more diseases then those who did not. Special care should be taken when changing or adding drug regimens in the event of an emergency hospitalization.

See page 2317

Sustained-Release Sodium Fluoride in the Treatment of the Elderly With Established Osteoporosis

Current medical strategies to treat osteoporosis involve the use of antiresorptive agents. However, the use of a bone-forming or anabolic agent for treating osteoporosis in the elderly could facilitate treatment because it targets the senescent decline in osteoblastic activity associated with decreased bone formation. In this article, Rubin and colleagues carried out a 3-year double-blind, randomized controlled trial to evaluate the efficacy and safety of sustained-release sodium fluoride (an anabolic agent) in treating elderly women with established osteoporosis. The addition of sustained-release sodium fluoride to a regimen of calcium citrate and cholecalciferol safely reduced the risk of vertebral fractures compared with calcium citrate and cholecalciferol alone by 60%.

See page 2325

Acute Precipitants of Congestive Heart Failure Exacerbations

Congestive heart failure (CHF) is characterized by frequent exacerbation of symptoms, often leading to hospitalization. Knowledge of these factors could help prevent clinical deterioration. This investigation was a prospective evaluation of the acute precipitants of CHF conducted as a substudy of the Randomized Evaluation of Strategies for Left Ventricular Dysfunction Pilot Study, a randomized trial of candesartan alone, enalapril alone, candesartan plus enalapril, and metoprolol or placebo in 768 patients over 43 weeks. Investigators systematically reported all episodes (n = 323) of worsening CHF symptoms. The factors associated with acute worsening of CHF symptoms were excessive sodium intake, noncardiac causes (notably pulmonary infections), arrhythmias, and the use of study medications, antiarrhythmic agents, and calcium channel blockers. The authors conclude that a wide variety of factors, many of which are avoidable, are associated with exacerbation of CHF.

See page 2337

Elevated Midlife Blood Pressure Increases Stroke Risk in Elderly Persons

Most strokes occur in older adults, with 72% occurring in subjects older than 65 years. An elevated blood pressure (BP) is the most important modifiable risk factor for stroke. However, predictions of stroke risk are traditionally based on current BP, and the potential impact of a subject’s past BP experience is unknown. Seshadri and colleagues from the Framingham Heart Study address this question using BP data gathered prospectively over 50 years in more than 5000 subjects. The authors report that past elevations in BP (up to 2 decades earlier) are a strong predictor of stroke risk in older adults (age, 60-90 years), even after accounting for current BP and even if current BPs are in a “normal” range. Effective prevention of ischemic stroke in the elderly will likely require early detection and treatment of hypertension and optimal control of BP throughout life.

See page 2343

Variation in Routine Electrocardiogram Use in Academic Primary Care Practice

To evaluate patterns of routine electrocardiogram (ECG) use in primary care practice, the authors used computerized billing data to examine ECG ordering by 125 academic internists. Using data on 69,921 patients without cardiac disease, adjusted rates of ECG ordering were calculated to account for patient age, sex, and diagnoses. Logistic regression evaluated additional predictors of ECG ordering. Electrocardiograms were ordered in 4.4% of visits. Variations in ordering practices were substantial. Group practices had adjusted ECG rates varying from 0.8% to 8.6%, while individual physicians’ rates ranged from 0.0% to 24%. Significant patient predictors of ECG use were older age, male sex, and the presence of clinical conditions. Nonclinical factors related to financial incentives also seemed to have an impact on ECG ordering. These findings suggest a need for greater consensus about screening ECG testing in primary care.

See page 2351