

This Week in the Journal

FEBRUARY 13, 2003

VOL. 348 NO. 7

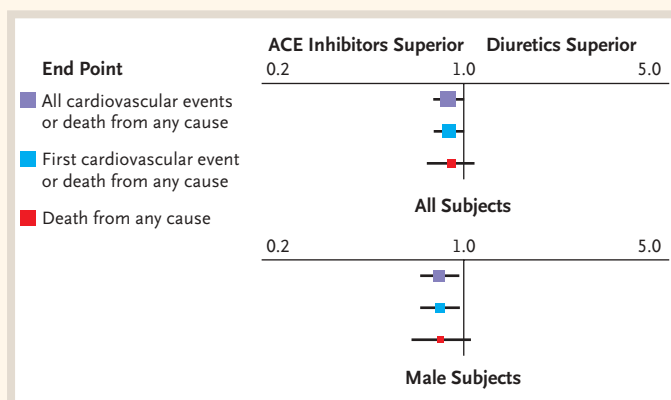
ORIGINAL ARTICLES

Outcomes with ACE Inhibitors and Diuretics for Hypertension in the Elderly

This prospective, open-label, randomized study compared the outcomes in hypertensive subjects 65 to 84 years of age who received therapy with angiotensin-converting-enzyme (ACE) inhibitors or diuretic agents. The rate of cardiovascular events or death from any cause was lower among male subjects who received ACE inhibitors.

Treating hypertension in older persons with an ACE inhibitor may confer an advantage over a diuretic in terms of outcome, despite similar reductions of blood pressure. The difference may be particularly evident among men.

SEE PAGE 583; EDITORIAL, PAGE 639



Endothelial Progenitor Cells and Cardiovascular Risk

Endothelial progenitor cells are mononuclear cells of bone marrow origin that enter the circulation and may help maintain the vascular endothelium. This study found an inverse correlation between the number of circulating progenitor cells and cardiovascular risk and a direct correlation with endothelial function in the brachial artery.

This preliminary study suggests that a population of circulating mononuclear cells may support the integrity of the vascular endothelium. The authors speculate that depletion or senescence of these cells may be a factor in vascular dysfunction and disease.

SEE PAGE 593; PERSPECTIVE, PAGE 581

Immunogenicity and the Efficacy of Infliximab in Crohn's Disease

In this observational study of patients who received multiple infusions of infliximab for Crohn's disease refractory to conventional treatment, antibodies against infliximab developed in 61 percent of patients. Antibodies decreased infliximab concentrations and the duration of response. Antibodies were less likely to develop in patients who were also receiving immunosuppressive agents.

Antibodies develop in most patients who receive multiple infusions of infliximab, an effect that reduces the duration of clinical response. Concomitant treatment with immunosuppressive agents may enhance the efficacy of infliximab.

SEE PAGE 601

THIS WEEK IN THE JOURNAL

CLINICAL PRACTICE

Initial Treatment of Hypertension

A 50-year-old black man has a blood pressure of 160/110 mm Hg on repeated measurements. He is 9 kg (20 lb) overweight, has a family history of hypertension, and smokes one pack of cigarettes daily. How should this patient be evaluated and treated?

Hypertension affects 25 percent of adults in the United States and is adequately treated in less than 30 percent of them.

SEE PAGE 610

DRUG THERAPY

Selective Estrogen-Receptor Modulators

The selective estrogen-receptor modulators, or SERMs, chemically diverse nonsteroid compounds, have tertiary structures that permit binding to the estrogen receptor. These compounds have either selective agonist or antagonist effects, depending on the target tissue. This article reviews current information concerning the molecular basis of SERM action and the tissue-selective agonist-antagonist effects of this class of medication. The article also offers a perspective on the therapeutic uses of SERMs and compares the SERMs with estrogen and nonestrogen alternatives.

SEE PAGE 618

CLINICAL IMPLICATIONS OF BASIC RESEARCH

HIV Evasion of the Immune System

Pathogens employ a variety of methods to evade the immune response, and human immunodeficiency virus type 1 (HIV-1) is exceptionally capable in this regard. A recent study demonstrates why antibodies generated against the commonly exposed HIV-1 glycoprotein 120 are usually unable to prevent infection and, in so doing, uncovers a new means of viral evasion. The surface of glycoprotein 120 is remarkably flexible, making it difficult for antibodies to get a grip. This finding has implications for the development of an effective HIV-1 vaccine.

SEE PAGE 643

SOUNDING BOARD

Postmenopausal Hormone Therapy

In contrast to observational studies, randomized clinical trials of hormone-replacement therapy have not shown a cardioprotective effect. The authors propose several methodologic and biologic explanations for these discrepant results.

SEE PAGE 645; PERSPECTIVE, PAGE 579