Characteristics of Contemporary Patients with Hypertension and Coronary Artery Disease

**Summary**

**Background:** Despite a high prevalence of hypertension in the population with CAD, there are limited data describing the clinical characteristics and treatments, as well as their interrelations in these patients. This is particularly true for black and Hispanic patients who have been underrepresented in randomized CAD trials.

**Hypothesis:** There exist racial and ethnic differences that define the characteristics of patients with both coronary artery disease (CAD) and hypertension.

**Methods:** This report describes the characteristics of Caucasian, Hispanic, and black patients enrolled in the International Verapamil SR/trandolapril Study (INVEST), a prospective trial undertaken exclusively in patients with CAD and hypertension.

**Results:** In all, 10,925 Caucasian, 8,045 Hispanic, and 3,029 black patients are described. An abnormal angiogram or documented myocardial infarction was observed more frequently in Caucasian patients (73%), while angina pectoris was more prevalent in Hispanic patients (87%). Diabetes and left ventricular hypertrophy were most common in black patients (33 and 29%, respectively), while hypercholesterolemia and prior revascularization (coronary artery bypass graft or angioplasty) were most common in Caucasian patients (64 and 41%, respectively). More than 60% of Hispanic and black patients were women—a unique characteristic for randomized CAD trials. Comparing race/ethnic cohorts, there were significant differences for all characteristics. More than 80% of patients in all race/ethnic groups were receiving antihypertensive therapy; however, only fewer than 25% had controlled blood pressure according to guidelines from the sixth report of the Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure.

**Conclusions:** This high-risk population of hypertensive patients with CAD has been undertreated and does not have well-controlled BP. Race/ethnic differences were observed for clinical characteristics and medication use.

**Key words:** coronary artery disease, hypertension, comorbidity, blood pressure control, Hispanic, black