

# INTRODUCTION

Left ventricular (LV) mass is significantly related to blood pressure (BP), and LV hypertrophy is a generally recognized complication of systemic hypertension (*Devereux et al., 1983*).

Also, the pattern of LV inflow velocities is frequently altered when BP is high, (*Fagard et al., 1993*) suggesting diastolic dysfunction. However, the variance of LV mass and inflow pattern that can be explained by casual BP is small.

The importance of exercise systolic blood pressure response as a determinant of left ventricular mass is less clear. Some reports have suggested that an exaggerated exercise systolic blood pressure response is associated with a propensity toward later development of sustained hypertension (*Wilson and Meyer, 1981*).

Several investigators, therefore, addressed the question of whether ambulatory (*Gosse et al., 1986*) or exercise (*Smith et al., 1992*) BP is a better predictor of target organ damage, morbidity, or even mortality. The results on the importance of exercise BP have not been consistent, which can at least partly be ascribed to differences in the selected population and in methodology.