INTRODUCTION

Blood pressure (BP) regulatory mechanisms were studied in children with contrasting risks for hypertension, based on paternal history. Heart rate and cardiac output declined significantly more in offspring of hypertensive parents during static exercise ***(De-Visser et al., 1996).***

Rebbeck et al. (1996) found that paternal and maternal history of hypertension contributes to the probability of an individual having hypertension.

A different behaviour of diastolic blood pressure was found in offspring of hypertensive parents compared to that of normotensive parents. This may be an expression of early vascular change in subjects with a genetic predisposition to hypertension ***(Seguro, et al., 1995).***

Similar to exaggerated blood pressure response to exercise, initial left ventricular mass (L.V.M.) in children is directly related to follow up systolic blood pressure adjusted for age and body size ***(Mahoney et al., 1988).***

In addition the best predilection for left ventricular mass (L.V.M.) in children are exercise blood pressure and not the resting blood pressure ***(Gottdiener et al., 1990).***

Beside left ventricular hypertrophy (LVH), impaired left-ventricular filling has been observed in subjects with borderline hypertension who had no other structural changes of the heart ***(Kapuku et al., 1993).***