INTRODUCTION

Prehypertension has been proposed as the diagnosis for the presence of blood pressures >120/80 mmHg but <140/90 mmHg (i. e., Bp below hypertension 140/90 mmHg but above ideal 120/80 mmHg). All studies concerned about patients who diagnosed as prehypertension discovered that they have subclinical target organ damage, including nephropathy or harbor an increased prevalence of nephropathy, and they need early recognition then it may be possible to reverse the usual progression into overt hypertension and thereby prevent patients from developing hypertension-related organ damage.(Norman M., 2009)

Because prehypertension is one step toward hypertension, the same factors are involved in the development of both, obesity is foremost, with male gender and black race also involved. (Keller G et al., 2003)

It is well defined that diabetes, impaired glucose tolerance, the metabolic syndrome, dyslipidemia, and smoking are the main diseases associated with more prehypertension. (Klausen KP et al., 2005)

With the association of prehypertension and microalbuminuria, it is likely that many individuals with prehypertension would be identified through estimating urinary albumin/creatinine ratios, higher albumin/creatinine ratios, even within the normal range, are independently associated with increased risk for development of hypertension which leads many authors to confirm that normal albumin excretion definition should be reevaluated. (John PF et al., 2008)

More recent studies have demonstrated that increasing levels of albumin excretion, even within the normal range, are associated with increasing risk for cardiovascular end points among individuals who have and do not have diabetes and are at high baseline cardiovascular risk, such as individuals with multiple cardiovascular risk factors and those with left ventricular hypertrophy. (Watchell K et al., 2003)

Of additional interest, serum uric acid, believed by some to be a major determinant of hypertension and atherosclerosis, is associated with microaluminuria in individuals with prehypertension. (Lee JE et al., 2006)

Prehypertensive individuals are at increased risk for developing hypertension and cardiovascular disease. Because LVH is apowerful and independent predictor of cardiovascular morbidity and mortality, early compromises in LV structure may explain part of the increased risk. (Vasan RS et al., 2001)

Prehypertension may mark the beginning of a progressive remodeling of the left ventricle that may go unnoticed for years. Increased left ventricular mass(LVM) is an independent predictor of cardiovascular disease and mortality. (Koren MJ et al., 1991)

Both lifestyle changes and drug therapy have been shown at least temporarily to slow the progression of prehypertension into hypertension. The trials, up til now, have likely been too late to stop the progress, because, at least in the spontaneously hypertensive rate, antihypertensive therapy must be given much earlier in the life span to prevent the future development of hypertension.(Bavikati VV et al., 2008)