Introduction
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Systemic hypertension is now known to be common enough, subtle enough and lethal enough to impress the cardiologist more poignantly than it has traditionally been. Through easily detectable as well as easily treatable, it is notorious for worldwide morbidity and mortality. The reason for this is attributed to its inherent propensity to induce vascular damage, leading to cardiovascular, cerebral, renal and ophthalmic complication. In most countries as many as 15-20 % of adult population are found at screening to have a raised Blood Pressure, about 2/3rd of them have mild hypertension (W.H.O. Bulletin 1993).

As the public and medical profession has become aware of the overall 8 bad consequences of even mild hypertension, enthusiasm for its early recognition and aggressive treatment has continued to mount. As reducing Blood Pressure has been clearly shown to decrease morbidity and mortality from cerebrovascular stroke, accelerated coronary events/congestive cardiac failure and renal failure (Macmonam et al 1990).

Various studies confirm that cardiovascular events related to hypertension comprise its major complications. In untreated cases, fifty percent of hypertensive patients die of cardiac problem, thirty three percent of stroke and ten to fifteen percent of renal failure (Eugene Braunwald, 2001).
The cardiovascular complications of hypertension can be divided into two groups: Coronary heart disease is said to exist, if there is left ventricular hypertrophy (LVH) and/or left ventricular dysfunction plus elevated blood pressure.

Asymptomatic patients with abnormal myocardial function due to hypertension need care at an early stage to prevent or retard development of left ventricular failure. This has focussed attention to the need of a technique that could provide information regarding the cardiovascular functional and anatomical status, conveniently.

Noninvasive investigatory procedures that could provide an assessment of left ventricular status are: Chest radiography, Electrocardiography, Radionuclide ventriculography and echocardiography. X-ray detection of L.V.H. is fraught with the problems of defining which portions of the cardiac silhouette belong specifically to left ventricle. Although there are probable and definite criteria for diagnosis of L.V.H. by E.C.G, but it is arrhythmias and blocks that E.C.G often gives a clear and irrefutable answer to the knowledgeable interpreter, whereas with myocardial disease, it lacks specificity. Epidemiological studies of hypertension using E.C.G reported a prevalence of 2.1% of L.V.H. in Framingham cohort. Another using echocardiography which is more sensitive in detecting left ventricular hypertrophy reported a prevalence of 16% (Levy D. et al 1988). Echo is 10 times more sensitive than E.C.G. in documenting L.V.H. (Malloy T.J. et al 1992). Echo Doppler study is modality of choice to document cardiac involvement in hypertension (Macfarland TM et at 1998). Besides, X-ray and E.C.G. are much
less sensitive than echocardiography in this respect, as evidenced by the study carried out, by Savage D.D. et al (1979), showing only 10% of hypertensive L.V.H. cases proved by echocardiography, could be detected on X-ray screening and E.C.G.

Radionuclide ventriculography only, like echocardiography, though can give a functional assessment of left ventricle yet its biggest limitation is its scarce availability even at the highest centres. Besides it is better suited to volume estimates. Its cost effectiveness compared with echocardiography puts it quite back in the scene of specialized investigations.

Thence, echocardiography has emerged as a promising modality. In contrast to radionuclide ventriculography, this technique has evolved from a laboratory curiosity, being undertaken in a few widely scattered centres, to the community hospital and even to the individual chamber of cardiologist. This provides valuable information both about any structural as well as functional abnormality of the myocardium at quite an early stage of onset of disease. The non-invasive and harmless nature, easy availability, relative ease of performance, the reliability and reproducibility of the resulting information and the sensitivity and specificity may make it the investigation of choice to detect myocardial abnormality in hypertensive patients.

Thus echocardiography has been a major breakthrough in this respect, and since then many studies have been undertaken to assess the cardiovascular status in hypertensive patients, and to find out its predictor value as
prognostic significance. In view of the increasing importance of myocardial dysfunction in hypertensive individuals, the present study has been undertaken with the aim to detect left ventricular diastolic and systolic function by means of echocardiography, in patients of systemic hypertension.