INTRODUCTION

Chronic renal failure is a functional diagnosis that is present when sufficient nephrons have been destroyed, so that the glomerular filtration rate (GFR) is depressed with subsequent irreversible progression to end stage renal disease ***(Alfrey & chan, 1992).***

The etiology of chronic renal failure varies from one country to another. In Egypt, congenital malformation is the leading cause for Chronic renal failure. ***(Safouh, 1996).***

Studies have also documented abnormal left ventricualr diastolic functions in patients with end stage renal failure. ***(Hunting & Alpert, 1998).***

A number of factors may alter cardiovascular dynamics in renal failure including anemia, hypertension, volume overloaded, electrolyte imbalance, edema and arteriovenous fistulas ***(Silverberg, et al., 2003).***

In chronic uremia, cardiomyopathy manifests itself as systolic dysfunction, concentric left ventricular hypertrophy (LVH) or left ventricular dilation. ***(Shirley, et al., 2006).***

The results indicate that diastolic dysfunction is already present in children with mild to moderate CRF and children with advanced renal failure and diastolic dysfunction may be at risk for ultimate worsening of cardiac function over time. ***(Kidney int, 2004).***

Cardiovascular disease is an important cause of mortality in patients undergoing maintenance dialysis, accounting for almost 50 percent of deaths**.** It is also an important source of morbidity, as the annual probability of hospital admission for congestive heart failure (CHF) and/or myocardial ischemia is approximately 20 percent in these patients**.** Progressive myocardial dysfunction, as suggested by increasing left ventricular enlargement, was most pronounced within the first year of the initiation of dialysis ***(Foley, et al., 1998).***