INTRODUCTION &AIM OF WORK

Acute rheumatic fever is common and serious public health problem in developing countries[1]. Rheumatic heart disease, an important sequel to rheumatic fever remains the most common acquired heart disease among children world wide and is the major cause of cardiovascular death during the first five decades of life in developing countries [2,3].

The major complication of acute rheumatic fever is the appearance of carditis and subsequent development of chronic valvular heart disease which seriously affect the left ventricular systolic and diastolic functions [4].

The diagnosis of the degree of severity of rheumatic carditis during the acute phase of the disease is very important because the degree of severity of cardiac affection leaves its impact on the ultimate prognosis of the illness and the degree of residual prognosis of the illness and the degree of residual RHD [5].

Several reports have highlighted the utility of echo-cardiography for diagnosis of rheumatic carditis and accurate evaluation of nature and degree of cardiac disease [6,7].

Of the available methods for non invasive assessment of the pattern of diastolic filling, the Doppler echocardiogrophy is currently the technique of choice for evaluating left ventricular diastolic function [8].

In patient with rhumatic carditis, the mitral valve is most often involved and mitral regurgitation is the most common finding on colour flow imaging. The majority of these patients have normal left ventricular systolic function and congestive heart failure was invariably associated with the presence of hemodynamically significant valve lesions [9].

The aim of this study is to assess the diastolic left ventricular function in children with acute rheumatic carditis using various echocardiography modalities (M-mode, 2D, Doppler and color Doppler techniques) and correlate these data to the clinical findings.