The effect of left atrium volume on patients’ prognosis in acute myocardial infarction
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Madam, diastolic function evaluated following acute myocardial infarction using Doppler echocardiography provides important prognostic information. Evaluating left atrium volume is a good way to estimate prognosis in patients with acute myocardial infarction as it indicates time and severity of diastolic dysfunction and longer term results of acute myocardial infarction. The present study evaluated the effect of left atrium volume on patients’ prognosis following acute myocardial infarction. It was a cohort study conducted on 100 patients who were admitted with acute myocardial infarction. They were studied for 9 months and their one-month mortality rate was evaluated. The patients’ demographic factors, risk factors, mechanical and arrhythmic complications, and echocardiography indices such as systolic and diastolic functions, and left atrium volume were noted. It was seen that mortality (27.3%, 6.22) in patients with atrium index >32ml/m² is more compared to cases with lower atrium index (1.3%, 1.78) (p<0.001). There was not any meaningful difference in mortality rate of the patients considering age and gender (p>0.05). The study indicated the lack of any meaningful difference in patients’ mortality rate in terms of hypertension, diabetes, smoking, and dyslipidaemia. However, mortality rate was significantly higher in myocardial infarction as a result of elevated-ST segment, diastolic dysfunction, restrictive pattern, ejection fraction of left atrium <40%, and left atrium volume index >32ml/m². High volume of the left atrium independently refers to bad prognosis in patients with acute myocardial infarction which is confirmed with the outcome of clinical predictors and common echocardiography indices, even following modification.

References