Echocardiographic Assessment Of Left Ventricular Systolic Function Among Patients with Chronic Kidney Disease Managed In Ebn Sena Dialysis Center In Diyala

Ismail Ibrahim Latif (Mb Ch B , Ph D) 1 , Ali Mosa Jaffar (MBChB, FICMS) 2 , Ahmed Talal Abdulla(MBChB, FICMS) 3 and Nabeel Khalid Mohammed Ali(MBChB, FICMS) 4

Abstract

Background: Cardiovascular diseases are prevalent in patients with chronic kidney disease and represent the major hazard for mortality in this population. Left ventricular hypertrophy is a cardiovascular complication in patients with chronic kidney disease and end-stage renal disease. Left ventricular hypertrophy in dialysis patients has generally a bad prognostic value, because it represents a risk factor for the development of cardiac arrhythmias, ischemic heart disease, heart failure and sudden death.

Objective: To study left ventricular systolic functions by Echocardiography in patients with chronic renal failure on hemodialysis program and their relation with some risk factors.

Patients and Methods: 100 patients with end stage renal failure on dialysis were studied by echocardiography, the patients were divided into two groups, the first group with normal echo study, while the second group consisted of patients with left ventricular systolic dysfunction. Risk factors including age, sex, duration of dialysis, hypertension, DM, and hemoglobin levels were compared between the groups.

Results: Left Ventricular disorders occurred in 65%, 34% of patients showed left ventricular systolic dysfunction, older age group, longer duration of dialysis, hypertension, DM, and anemia were found to be significantly associated with left ventricular systolic dysfunction.

Conclusion: Our study concluded that large numbers of end-stage renal disease patients have hypertension and diabetes as the etiology of their disease, which could be prevented by better approach in controlling blood pressure and blood sugar. Anaemia is a major problem and as a predictor of cardiovascular risk factor for those patients. Echocardiographic Left Ventricular Study are prognostic predictors in chronic kidney disease patients, which suggest that echocardiography may play a vital role in assessing cardiac morphology and functions in those patients.

Key words: Left Ventricular Systolic Dysfunction, Chronic Kidney Disease, Dialysis, End-Stage Renal Disease.

Corresponding Author: ismail_6725@yahoo.com

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1,2 College of Medicine -University of Diyala -Diyala - Iraq.
3,4 Baquba Teaching Hospital -Diyala - Iraq.