Prevalence of echocardiographic anomalies in hemodialysis at Chu Ibn Rochd

Dr. Imane Failal¹, Dr. Sanae Ezzaki¹, Dr. Salma El khayat¹, Pr. Ghizlane Medkouri¹, Pr. benyounes ramdani¹

¹Chu Ibn Roshd, Casablanca, Morocco

Introduction:
Cardiovascular anomalies are frequent and often early, severe and masked in patients with renal impairment. These cardiovascular complications are the main causes of mortality and morbidity in hemodialysis patients, responsible for 11.65% to 58.57% of deaths during the first year. The clinical manifestations of these cardiovascular diseases are dominated by heart failure and sudden death. The diagnosis of these cardiovascular anomalies by cardiac ultrasound allows the individualization of patients at high cardiovascular risk.

The objective of this study is to assess cardiovascular complications in chronic hemodialysis patients in the nephrology and hemodialysis department of the Ibn Rochd University Hospital.

Materials and methods:
Descriptive cross-sectional study with retrospective collection, having focused on 70 patients with chronic renal failure on dialysis, within the hemodialysis service of the IBN ROCHD CHU.

Results:
The records of 70 chronic hemodialysis patients were explored, the sex ratio was M/W 1.1 with a slight male predominance. The average age was 46.5 years with extremes ranging from 16 to 93 years. The initial nephropathy was an indeterminate nephropathy in 53.5%, glomerular in 29.5%, diabetic in 7% and hypertensive in 1.4%. The age of the periodic hemodialysis treatment in our patients varied from 1 month to 44 years, with an average duration of 17.3 years. 91.5% of patients had an arteriovenous fistula as a vascular approach, 8.4% of patients were dialysis on a catheter. A cardiac ultrasound was normal in 19% of hemodialysis patients. Echocardiographic abnormalities are dominated by valve lesions which represent 49.5%, followed by left ventricular enlargement (14.5%), then comes dilated cardiomyopathy (12%), And pulmonary hypertension represents only 3.8%.

Conclusion:
Echocardiography is a non-invasive, available and reproducible test that can accurately diagnose a heart defect. It is an essential tool in the care of the hemodialysis patient who dies every second time from a cardiac cause. Early detection and management of chronic renal failure can certainly prevent these complications.