Cardiovascular abnormalities in patients of chronic kidney disease on hemodialysis - A study from tribal areas of Chhattisgarh presenting to a tertiary care hospital

Punit Gupta and G B Gupta
Pt. J N M Medical College & GBG Kidney Care Hospital, India

Aim: To study the prevalence cardiovascular changes among patients of Chronic Kidney Disease on hemodialysis from the Tribal areas of Chhattisgarh, presenting to a tertiary care hospital.

Material & Methods: 85 patients of Chronic Kidney Disease on hemodialysis getting admitted to Nephrology Unit, Department of Medicine, Pt. J N M Medical College & GBG Kidney Care Hospital, and Raipur were studied. All patients were subjected to Renal Function Tests, echocardiography and all other relevant routine investigations.

Results

• A total of 55 patients were studied of which 80% were males and 20% females.
• The mean age of the patients was 43.74 ± 13.03 years.
• 76.36% patients were on twice weekly dialysis while 23.6% were on thrice weekly dialysis.
• The Cardiovascular abnormalities observed were LVH (63.6%), pericardial effusion (58%), Diastolic dysfunction (27.2%), Valvular lesions (27.2%), Systolic dysfunction (12.73%), and Valvular calcification (10.9%).
• Among the patients on twice weekly dialysis prevalence of LVH, Pericardial effusion Diastolic Dysfunction, Valvular lesion, Systolic dysfunction & valvular calcification were 64.28%, 59.5%, 28.50%, 28%, 11.90% & 9.5% respectively, while among the patients on thrice weekly dialysis prevalence were 61.5%, 53.8%, 23%, 69.2%, 15.3% & 15.3% respectively.
• Among Diabetics Diastolic dysfunction, Valvular lesions & calcification were present in 46.60%, 33.33% & 13.33%.
• Mitral regurgitation was present in 21.8% of patients.

Conclusion

• LVH was the most common cardiovascular abnormality.
• LVH, Diastolic dysfunction & pericardial effusion were more common in patients on twice weekly dialysis as compared to patients on thrice weekly dialysis (p value<0.05, <0.01 & <0.01 respectively).
• Diastolic dysfunction, valvular lesions & calcification were more common among diabetics (p value <0.001, <0.1 & <0.5 respectively).
• Mitral regurgitation was the most common valvular lesion.

punit282004@yahoo.co.in