

Cardiovascular disease in kidney transplant patients

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Introduction: Cardiovascular disease is the leading cause of death in kidney transplant patients. Patients on hemodialysis have a 10-20 times greater risk of developing cardiovascular disease compared to the general population. The risk of cardiovascular disease may differ in hemodialysis patients and kidney transplant patients.¹ **Aims:** To determine the frequency of risk factors for occurrence of cardiovascular disease and frequency of cardiovascular diseases in kidney transplant patients and patients on chronic hemodialysis.

Patients and Methods: We compared the frequency of risk factors for cardiovascular disease and the incidence of cardiovascular disease in kidney transplant patients and hemodialysis patients. Patients were divided into two groups: kidney transplant patients (60 patients) and patients treated with hemodialysis (30 patients).

Results: The incidence of non-traditional risk factors for cardiovascular disease in kidney transplant patients was as following: hypertension 30%, diabetes mellitus 23.3%, 26.67% active smoking, dyslipidemia 41.67%. Congestive heart failure had 3.33% kidney transplant patients and 16.67% patients treated with hemodialysis. Hypertension had 30% kidney transplant patients and 66.67% patients treated with hemodialysis. Left ventricular hypertrophy had 50% kidney transplant patients and 76.67% patients treated with hemodialysis. Coronary heart disease had 13.33% kidney transplant patients and 36.67% patients treated with hemodialysis. Atrial fibrillation had 10% kidney transplant patients and 26.67% patients treated with hemodialysis. Mitral regurgitation had 33.33% kidney transplant patients and 56.67% patients treated with hemodialysis. Aortic regurgitation had 15% kidney transplant patients and 33.33% patients treated with hemodialysis.

Conclusion: We find statistically significant differences in the frequency of cardiovascular disease between kidney transplant patients and patients treated with hemodialysis.

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LITERATURE

1. Aziz F, Jorgenson M, Garg N, Parajuli S, Mohamed M, Raza F, et al. New Approaches to Cardiovascular Disease and Its Management in Kidney Transplant Recipients. *Transplantation.* 2022 Jun 1;106(6):1143-1158. <https://doi.org/10.1097/TP.0000000000003990>