

Association of diabetes and dyslipidemia in hypertensive patients in nephrology consultation: Prevalence and cardiovascular complications

Chifaa Triqui¹, Meriam Khdhar^{1,2}, Mouna Jerbi¹, Sarra Hadded¹, Hanene Gaied¹, Raja Aoudia¹, Rim Goucha¹

¹Nephrology Department of Mongi Slim Hospital, La Marsa, Tunisia

²Laboratory of Kidney Pathology LR00SP01 Charles Nicolle Hospital, Tunis, Tunisia

Abstract

Introduction: Diabetes, dyslipidemia and hypertension are increasing in prevalence worldwide and they are among the most cardiovascular factors. The aim of this work was to know the cardiovascular complications found in hypertensive patients with diabetes and dyslipidemia followed in nephrology consultation.

Materials and Methods: We conducted a descriptive retrospective study over a period of two years (January 2020-January 2022) including hypertensive patients aged over 18 years followed in nephrology consultation. Cardiovascular risk was estimated by calculating the Framingham score.

The stage of chronic kidney disease (CKD) was defined according to the KDIGO 2012 classification

Results: Our study included 73 patients followed for hypertension associated or not with nephropathy. The mean age was 69.62±9.59 [30-96] with a sex ratio M/F = 1.35. Diabetic patients were 44 and dyslipidemic patients were 25. Diabetes associated with dyslipidemia were found in 21 patients (28.76%). Diabetic nephropathy was found in 32 patients (72.72%). The average Framingham score was (22.94%) and (21.52%) in diabetic and dyslipidemic patients respectively. Obesity was found in 15 patients of our population (20.54%), of which, 12 patients were diabetic (80%) and 7 patients were dyslipidemic (46.66%). Coronary artery disease was found in 14 patients in our population (19.17%) of whom 8 were diabetic (57.14%) and 3 were dyslipidemic (21.42%). Heart failure was found in 8 patients, 6 of whom were diabetic (75%) and 3 of whom were dyslipidemic (37.5%). Six patients in our population had a stroke (8.21%), 5 of whom were diabetic (83.33%) and 2 were dyslipidemic (33.33%). Regarding the renal impact, we noted the presence of chronic kidney disease stage 3 or more in 55 patients (75.34%) among which 19 patients had dyslipidemia (34.54%).

Conclusion: We noted a multitude of cardiovascular events in patients with diabetes and/or dyslipidemia associated with hypertension. Early identification and management of these risk factors are necessary to prevent cardiovascular complications.