HYPERTENSION AND CHRONIC KIDNEY DISEASE: A CLOSE AND PROPORTIONAL RELATIONSHIP

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Background and Aims: Hypertension is a common clinical finding in patients with Chronic Kidney Disease (CKD). In fact, hypertension accelerates the progression of the renal disease and damages other target organs leading to worsening renal failure and increased incidence of cardiovascular morbidity and mortality.

Method: We conducted a retrospective, cross-sectional study at the Department of Nephrology at Mongi Slim Hospital, and we studied the relation between blood pressure levels and CKD stages. The stage of chronic kidney disease (CKD) was defined according to the KDIGO 2012 classification.

Results: A total of 89 patients were recruited in this study. The mean age was 69.19 years (rang 30-96) with a gender ratio M/F of 1,225. The patients who had hypertension were 41 (46.06%). We noted the presence of chronic kidney disease stage 3 or more in 64 patients (71.91%) among whom 32 patients had hypertension. Thirty-seven patients had a stage 3 CKD, 14 had a stage 4, and 13 had a stage 5. As for blood pressure levels, the mean systolic blood pressure was 137,94 mmHg, and the diastolic 79,52 mmHg. Twenty-three patients had stage 1 hypertension and 13 presented a stage 2 hypertension. Stage 3 hypertension was noted in 5 patients, who all had a stage 3 or 4 chronic kidney disease. Higher blood pressure levels were noted in patients with CKD stage 3 or more: Among the 13 patients who had a stage 5 chronic kidney disease, 7 had hypertension.

Conclusion: Hypertension is ubiquitous in the chronic kidney disease, and it can be a cause or consequence of CKD. Both hypertension and CKD contribute to each other and it has been noted that patients with CKD are at higher risk for hypertension-related adverse outcomes, including cardiovascular disease, and therefore, the management of hypertension is particularly important in patients with CKD.