Pharmacotherapeutic profile and blood pressure control in hypertensive diabetic patients

Rania Kandil[1], Khadhar Meriam[1,2,3], Haddad Sarra[1,3], Mouna Jerbi[1,3], Hanene Gaied[1,3], Bettaieb Asma[1,3], Rajaa Aouadia[1,3], Rim Goucha[1,3]

[1]Mongi Slim Hospital, Tunis, Tunisia.
[2]Research laboratory (LR00SP01), Tunis, Tunisia.
[3]Faculty of Medicine of Tunis, Tunis, Tunisia

Abstract

Introduction: The combination of hypertension and diabetes is common and contributes to an increased cardiovascular risk and acceleration of degenerative conditions. This underscores the importance of early detection and treatment of hypertension in diabetic patients.

Description: A retrospective study was conducted on a cohort of patients with diabetic nephropathy and hypertension over a 10-year period. Demographic characteristics, antihypertensive treatments, and blood pressure (BP) measurements were collected. BP targets were defined according to ESC/ESH recommendations: BP < 130/80 mmHg for patients under 65 years old, < 140/80 mmHg for those aged between 65 and 79, and < 150/80 mmHg for patients over 80 years old.

Results: A total of 129 medical records were reviewed. The average age was 64.77 ± 10.8 years, with a gender ratio (M/F) of 1.22. Renin-angiotensin system blockers (RASB) were the most prescribed antihypertensives (71.4%). A combination of antihypertensive treatments was prescribed to 78% of patients. Among the 120 patients receiving combination therapy, 52% were on dual therapy, and 35% were on triple therapy. In monotherapy, angiotensin-converting enzyme inhibitors were the most prescribed (52.8%), followed by calcium channel blockers (33.3%). In dual therapy, the most common combination was a RASB and a calcium channel blocker (58.8%). After one year, 56.7% of patients achieved BP control. Among them, 34.6% had well-controlled hypertension from the start. The average systolic blood pressure in this group was 136.13 ± 18.9 mmHg, and the average diastolic blood pressure was 77.28 ± 10.46 mmHg.

Conclusion: The results highlight the importance of an integrated and individualized management approach to optimize the care of this high cardiovascular risk population.