

Prevalence of Chronic Kidney Disease in Patients with Cardiovascular Disease

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Abstract

Chronic kidney disease (CKD) is a worldwide public health alarming problem. Although both heart and kidneys are separated by a quite distance within the body and they perform varied functions, there is a close physiological relationship between them. The diseases in the kidneys can trigger a disease in the heart and vice versa. High blood pressure is the most significant risk factor for the development and progression of chronic kidney disease (CKD). Lowering blood pressure is a goal to prevent CKD progress. Chronic abnormalities in cardiac function (e.g., chronic congestive heart failure) causing, chronic kidney disease and anemia appear to act together in a vicious circle in which each condition causes or exacerbates the other progressive chronic kidney disease.

Objective: To assess the prevalence of chronic kidney disease in patients with cardiovascular disease at Shebin El-Kom Teaching Hospital and Menoufia University Hospital Cardiology Outpatient Clinic, Menoufia Governorate, Egypt.

Methods: This is a cross-sectional study that was conducted in Shebin El-Kom Teaching Hospital Car-

diology Outpatient Clinic, Menoufia University Cardiology Outpatient Clinic from April 2019 to July 2019. This study included 200 patients with cardiovascular disease or hypertension for more than 6 months. All patients were subjected to detailed history taking, clinical examination, laboratory investigation, echo and abdominal ultrasound.

Results: This study included 200 patients with cardiovascular disease or hypertension for more than 6 months, which showed that: 63 (31.5%) were diagnosed as chronic kidney disease, 24 (38%) known to be CKD, 39 (62%) not known diagnosed in our study. Uncontrolled hypertension, congestive heart failure, diuretics and ACEI or ARBS with diuretics together are significant risk factors for renal impairment; uncontrolled hypertension and diuretics are the most predictors for renal impairment.

Conclusion: Uncontrolled hypertension is the most preventable cause of renal impairment; RAAS not cause renal impairment but lead to decreased GFR in CKD patients. We should be careful with ACEI or ARBS with diuretics or diuretics only and control congestive heart disease to avoid kidney injury and chronic cardiorenal.

Note : Said S. Khamis; Prevalence of Chronic Kidney Disease in Patients with Cardiovascular Disease; Nephrology and Urology 2021; March 22-23, 2021; Paris, France