

METABOLIC SYNDROME IN PATIENTS UNDERGOING HEMODIALYSIS

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Abstract: **Introduction:** Metabolic syndrome (MS) is characterized by being a set of cardiometabolic factors that manifest themselves in an individual and worsen their prognosis. Such factors, such as obesity, high blood pressure, dyslipidemia, insulin resistance, among others, are also observed in chronic kidney disease (CKD), which highlights the association with metabolic syndrome. Regarding patients with advanced stage CKD and, consequently, undergoing dialysis, hypertriglyceridemia, a drop in high-density lipoprotein (HDL) and an increase in insulin resistance are noted. Such changes increase the number of MS diagnoses in dialysis patients, as there is dyslipidemia and defects in the uptake of glucose in the body, in addition to electrolyte imbalances generated during the hemodialysis (HD) procedure. Currently, the diagnosis of MetS is based on the components/risk factors and cutoff points established by the National Cholesterol Education Program's Adult Treatment Panel III (NCEP-ATP III) and the International Diabetes Federation (IDF). **Objective:** to analyze the prevalence of MS diagnosis in hemodialysis patients using the NCEP-ATP III and IDF. **Methodology:** This is a literature review of articles from the last seven years, in data sources Scielo, Biblioteca Virtual em Saúde and PubMed, which used the descriptors "metabolic syndrome", "hemodialysis" and "chronic kidney disease". During the research, complete articles written in Portuguese and English were used. **Literature review:** Studies demonstrate that HD patients evaluated according to the IDF and NCEP-ATP III had a prevalence of MS of 36% and 51.8%, respectively. Another important piece of information is that people with CKD on hemodialysis have a higher risk of cardiovascular morbidity and mortality when compared to individuals without chronic kidney disease, as they

have multiple metabolic abnormalities that can accelerate atherosclerosis, such as high blood pressure, dyslipidemia and insulin resistance. **Conclusion:** In view of the above, it is essential to understand the relationship between hemodialysis chronic kidney disease patients and MS, for better therapeutic management and prognosis. It is noteworthy that the strengthening of public policies for health promotion and prevention of diseases and illnesses must be prioritized by the entire interdisciplinary team, aiming to improve quality of life for the patient.

Keywords: Chronic Kidney Disease; Hemodialysis; Metabolic syndrome.

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