

HIV-Positive Patients with Metabolic Syndrome

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Editorial

A group of HIV-positive patients may show a variety of anomalies associated to persistent infection and antiretroviral therapy. In 7–45 percent of HIV-positive patients, a state of coexisting, interacting, and connected illnesses known as metabolic syndrome is identified. Its presence is linked to adipose tissue distribution anomalies, which are referred to as ART-related lipodystrophy syndrome. Hypertriglyceridemia and low HDL cholesterol concentration are the most common characteristics of metabolic syndrome seen after HIV infection, while increased waist circumference is the least common. Revision and possible modifications in antiretroviral therapy, diet, changes in physical activity, and pharmaceutical management of particular components of the metabolic syndrome are all part of the treatment for metabolic syndrome. We give a review of issues related to the epidemiology, aetiology, symptoms, and therapy of metabolic syndrome in HIV-positive individuals in this journal.

The phrase "Metabolic Syndrome" (MS) refers to a condition in which coexisting, connected metabolic abnormalities interact, raising the risk of atherosclerosis, cardiovascular disease, and type 2 diabetes significantly. Gerald Raven is credited with coining the term "syndrome X," which describes the occurrence of a cluster of illnesses such as dyslipidaemia, reduced glucose tolerance, and hypertension, and considers all of these abnormalities to be independent risk factors for cardiovascular disease. As our understanding of these illnesses grew, the idea of insulin resistance and, eventually, metabolic syndrome was born. Resistance to insulin action and hyperinsulinemia are the most important etiopathogenetic factors in MS. Abdominal obesity, dyslipidaemia, raised Triglyceride (TG) levels, reduced HDL cholesterol concentration, hypertension, and impaired glucose tolerance or diabetes are all disorders associated with MS.

Hypercoagulability (clotting and fibrinolysis problems) and pro-

inflammatory states (laboratory markers of inflammation) are also more common in MS patients. The following classifications are the most often used and deemed valid among numerous previously established definitions, owing to their applicability: Adult Treatment Panel III (NCEP ATP III) of the National Cholesterol Education Program and the International Diabetes Federation (IDF). MS diagnosis is critical for identifying people at risk for cardiovascular disease and diabetes, as well as for implementing multidirectional care aimed at preventing and treating consequences associated with the illness. MS affects 22.8% of men and 20% of women in Poland, according to the WOBASZ survey from 2005, and its prevalence rises with age. Aside from an improvement in predicted longevity of HIV-positive patients, there have been several reports in recent years discussing metabolic issues such as lipodystrophy, dyslipidaemia, and insulin resistance due to the constant advancement of cART. Fat tissue distribution changes are linked to metabolic disorders and increase the risk of cardiovascular events.

Significant changes in patient appearance due to lipoatrophy and lipoaccumulation, which may be accompanied by plasma lipid abnormalities, characterise cART-related lipodystrophy. HIV-positive Patients with substantial weight loss and dyslipidaemia require wasting control first and foremost. A dietician's help may be required. Obese individuals should be urged to lose weight, but strict diets, such as fasting, cannot be used in HIV infection since they may weaken immunity. Nonpharmacological treatment for metabolic syndrome includes lifestyle and behaviour adjustments, as well as pharmacological management of specific metabolic syndrome components. The development of metabolic syndrome is a separate risk factor for atherosclerosis, diabetes, and cardiovascular disease. To summarise, more research is needed to establish the precise pathomechanism of metabolic abnormalities in HIV-positive patients, as well as to optimise antiviral therapy, which may help to minimise the risk of cardiovascular disease and type 2 diabetes.

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