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Review Article and Clinical Experience: THE MetS: ONE OF THE MAJOR THREAT TO HUMAN HEALTH

Abstrak :

The metabolic syndrome represents a cluster of risk factors in which CVD has been generally accepted as the primary clinical outcome. When T2DM become clinically manifest, CVD risk rises sharply. Beyond CVD and T2DM, patients with the MetS are likely susceptible to other conditions, notably as mentioned below. Different criteria have been proposed by the WHO (1998) and by the ATP-III (2001) for the diagnosis of the MetS. The author summarized 10 components of the MetS called the “Widened MetS”, such as: 1. Visceral Obesity, 2. Insulin Resistance, 3. Atherogenic Dyslipidemia, 4. Raised Blood Pressure, 5. Proinflammatory State, 6. Prothrombotic State, 7. Vascular Abnormalities, 8. Hyperuricemia, 9. Adrenal Incidentaloma, 10. Fatty Acid Deposition in the liver (NASH). Obesity, especially visceral obesity, plays as a key component in contributing to the clustering of such risk factors. The MetS: the Iceberg Concept emphasizes that cardiovascular burden has been recognized as the tip of an iceberg in which the immersed part is the preceding clustering of the metabolic abnormalities. Patients with the MetS are at increased risk for CHD. Almost 50% of the population-attributable risk for diabetes could be explained by the presence of ATP-III metabolic syndrome (the MetS as a predictor of diabetes). Regardless of diagnostic criteria used, lifestyle modifications, with emphasis on weight reduction, contributes first-line intervention for individuals with the MetS. In addition, treatments specifically targeting insulin resistance and metabolic risk factors should be considered for patients with the MetS. The WHO-1998 and the ATP III – 2001 criteria have recently proposed a formal definition of the MetS. The latter identified 6 components (no. 1-6) of the “Widened MetS” that related to CVD. The MetS is a predictor of T2DM and CVD, and the latter can be viewed as its primary clinical outcome. Lifestyle modifications contribute first-line therapy for the MetS. Drug treatment targeting obesity, insulin resistance, and risk factors (atherogenic dyslipidemia, blood pressure reduction, etc) should be initiated. The MetS is one of the major threats to human health. To date, the MetS represents a major worldwide public health problem that should be early detected, prevented, and appropriately managed to minimize the prevalence of its CVD outcome.

Keyword :

Metabolic syndrome (MetS), WHO-1998, ATP III-2001, Widened MetS, Type 2 Diabetes Mellitus

Daftar Pustaka :

DeFronzo, RA & Ferrannini, E Insulin resistance. A multifaceted syndrome responsible for NIDDM, obesity, hypertension, dyslipidemia, and atherosclerotic cardiovascular disease Diabetes Care 1991 -
Einhorn, D, Reaven, GM & Cobin, RH et al. American College of Endocrinology position statement on the insulin resistance syndrome Endocr Prac 2003 -
Berry, EM & Mechoulam, R Tetrahydrocannabinol and endocannabinoids in feeding and appetite Pharmacology & Therapeutics 2002 -