

Metabolic Syndrome and Means of Early Diagnosis in Albania

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Abstract
Background
The metabolic syndrome is progressively more common worldwide. It is linked with the rise in obesity and lifestyle risk behaviors. It is also controversial; its value in predicting cardiovascular disease and diabetes risk and in guiding therapy has been challenged.
Objective
This article objective is to provide guidance on the diagnosis of the metabolic syndrome and the values for its prevention and management in perspective of primary care, taking into consideration etiological factors and the difficulty of managing its constituent risk factors.
Discussion
Diagnosis of metabolic syndrome is useful in focusing attention on central adiposity and insulin resistance as risk factors both for the syndrome, cardiovascular and diabetes morbidity and mortality. Its assessment requires measurement of waist circumference, a simple but not often performed procedure in general practice in Albania.
Conclusion
The most essential components for the prevention and management of the metabolic syndrome are measures to change diet and physical activity in order to accomplish and continue weight loss.
Keywords: Metabolic syndrome, obesity, risk, cardiovascular disease, prevention, management

Introduction

The metabolic syndrome is increasingly widespread, national wide and in the world as well. Recent studies, found that each year 3.2 million people around the world die from complications associated with diabetes.[1, 2, 3, 4] Type 2 diabetes, which accounts for 80-90 % of all diabetes, has become one of the major causes of premature illness and death, mainly through the increased risk of cardio vascular diseases - CVD which is responsible for up to 80 %of these deaths.[4] In most people with glucose intolerance or type 2 diabetes, there is a multiple set of risk factors that commonly appear together, forming what is now known as *Metabolic Syndrome*.

The cardiovascular complications of diabetes, which is also a foremost cause of blindness, amputation and kidney failure, relation for to a great extent of social and economic burden of the disease. The forecast that diabetes incidence will double by 2025 indicates a corresponding rise in cardiovascular associated illness and death, with an inevitable and deep impact on global healthcare systems in general.

Discussion

Metabolic syndrome is a growing epidemic throughout the world. Approximately 1 adult in every 4 or 5, depending on the country, has metabolic syndrome.[1, 2, 3, 4] The incidence increases with age; it has been estimated that in people over 50 years of age, metabolic syndrome affects more than 40% of the population in the United States of America and nearly 30% in Europe.[3, 4] The worldwide prevalence of obesity has doubled in the last two decades. The prevalence of obesity and metabolic syndrome varies between different countries and ethnic groups.[3, 4, 5]

Metabolic syndrome it is not only an epidemiological clustering of risk factors, but also has a common underlying patho-physiological cause: insulin resistance associated with central adiposity. These are in turn related to underlying genetic and early life influences and a range of lifestyle risk factors, including sleep deprivation and physical inactivity.

Until recently, there has been a multiplicity of definitions. This has been resolved in 2009 by the publication of a joint statement and a single definition agreed to by a number of relevant national and international bodies. According to the new International Diabetes Federation (IDF) and American Heart Association (AHA) definition in 2009, any three (or more) of the following factors constitutes a diagnosis of metabolic syndrome:

Increased waist circumference: ethnicity specific - eg, Caucasian men ≥94 cm and women ≥80 cm; South Asian men ≥90 cm and women ≥80 cm.

If body mass index is over 30 kg/m^2, central obesity can be assumed and waist circumference does not need to be measured.

Raised triglycerides:

>150 mg/dL (1·7 mmol/L)

Or specific treatment for this lipid abnormality

Reduced HDL-cholesterol:
<40 mg/dL (1·03 mmol/L) in men
<50 mg/dL (1·29 mmol/L) in women
Or specific treatment for this lipid abnormality
Raised blood pressure:
Systolic ≥130 mm Hg
Diastolic ≥85 mm Hg
Or treatment of previously diagnosed hypertension
Raised fasting plasma glucose:
Fasting plasma glucose ≥100 mg/dL (5·6 mmol/L)
Most people with type 2 diabetes will have metabolic syndrome based on these criteria
In Albania, unfortunately we medical professionals face medical cultural challenge in patient clinical assessment approach. In primary care settings waist circumference is not evaluated, not because of lack of means rather than not appreciating the significance. Another difficulty is the laboratory service access in primary health care system that is not available and therefore making the road of diagnosis long enough to *discencourage* the population to profit from medical system stated by law.

Conclusion

A professional approach to metabolic syndrome requires addressing several risk factors together. The most essential components for the prevention and management of the metabolic syndrome are measures to change diet and physical activity in order to accomplish and continue weight loss.

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