

THE METABOLIC SYNDROME FROM THE VIEW POINT OF PUBLIC HEALTH: WITH SPECIAL REFERENCE TO NONALCOHOLIC FATTY LIVER DISEASE

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Changes in human behavior and lifestyle over the last century have resulted in a dramatic increase in the incidence of obesity, type 2 diabetes, and the metabolic syndrome. Differences in the reported overall prevalence of the metabolic syndrome, which is generally in the range of 10–30% depend on the diagnostic criteria and subjects of the study. Recently, Japanese criteria for diagnosis of the metabolic syndrome were defined. With these criteria, presence of visceral obesity is essential for the diagnosis and is simply determined by measurement of waist circumference. Reflecting a dramatic increase in the incidence of obesity and type 2 diabetes, the incidence of the metabolic syndrome is increasing in Japan as well as in Western countries, regardless of the criteria applied.

Recently, the number of workers with elevated liver enzymes, in whom virus hepatitis, alcoholic liver disease, drug induced hepatitis, autoimmune hepatitis, and iron overload were ruled out as causal agents, has also be found to be increasing at workplace health checkups. Most of such workers have components of the metabolic syndrome and the presence of steatosis in the liver, this pathologic condition now being termed nonalcoholic fatty liver disease (NAFLD).

In this review, we describe the relationship between NAFLD and the metabolic syndrome.

Key words : metabolic syndrome, nonalcoholic fatty liver disease, visceral obesity, insulin resistance, aldehyde dehydrogenase 2 genotype

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