Epidemiology of Metabolic Syndrome

Seoul Boramae Hospital/Seoul National University College of Medicine Sang-Hyun Kim

There are still a limited number of studies assessing the prevalence of metabolic syndrome in the community. The aim of this study is to investigate the prevalence and gender-related characteristics of metabolic syndrome in Korean community

A total of 417 community subjects (mean age was 60.7 ± 13.6 years, 35.3% were men) who attended the routine check-up were analyzed. National Cholesterol Education Program-Adult Treatment Panel (NCEP-ATP) III clinical guideline was used to define metabolic syndrome. Metabolic syndrome was diagnosed in 38.1% of study subjects. The prevalence of metabolic syndrome was not different between men and women (men 39.0% vs women 37.5%, p=0.766). The positive association between age and the prevalence of metabolic syndrome was more pronounced in women (χ 2=17.52, p for trend<0.001) than men (χ 2=2.38, p for trend=0.123). In young age group (<50 years), the prevalence of metabolic syndrome was higher in men than in women (34.7% vs 11.7%, p=0.042). This gender difference was not observed in older group (\geq 50 years). The most prevalent factor of metabolic syndrome was hypertriglyceridemia (49.9%) and hypertension (47.6%) in both genders. Among metabolic syndrome components, central obesity (40.5% vs 25.2%, p=0.002) and hypertriglyceridemia (54.5% vs 41.8%, p=0.015) were more prevalent in women than in men, and the prevalence of other components were similar between genders.

In the community, metabolic syndrome was highly prevalent in middle-aged and elderly Korean adult. Age related change of metabolic syndrome prevalence was gender specific.