

# **Association between adiponectin gene variants in subjects of metabolic syndrome in elderly Taiwanese ---A Hospital-based Study**

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**Introduction:** People with metabolic syndrome(MS) are at greater risk for atherosclerotic cardiovascular disease. Most are also insulin resistant. Serum adiponectin levels and its several single nucleotide polymorphisms (SNPs) in the adiponectin gene have been reported associated with the metabolic syndrome. This study investigates the relationship between. adiponectin gene variants in elderly subjects of metabolic syndrome in Taiwan

**Methods:** This was a cross-sectional hospital-based study. We analyzed the health status of elderly who voluntarily visited the China Medical College Hospital in Taichung for preventive services from January to December 2006. The preventive services included history taking, physical examination, and measurement of fasting blood biochemistry and adiponectin SNP 45 and SNP -11426 were measured in this study. The MS criteria were modified from the Third Report of the National Cholesterol Education Program's Adult Treatment Panel (ATP III, 2001).

**Results:** Of the 215 persons, 42% were men and 58% were women (mean age,  $63.6 \pm 7.2$  years).The MS prevalence rate was 40%(86/215) . After adjusted for appropriate covariates, individuals with adiponectin SNP45TT and SNP-11426 AA had a1.62-fold risk (95% CI, 0.53-4.94) and 1.49-fold risk (95% CI, 0.37-6.02) to develop metabolic syndrome than those with SNP45GG and SNP-11426 GG.

**Conclusion:** Our study showed the high prevalence of metabolic syndrome in elderly in Taiwan. However the polymorphisms of adiponectin SNP45 and SNP-11426 can't modify the influence on metabolic syndrome risk in elderly Taiwanese .