Association of Gghrelin Polymorphisms with Metabolic Syndrome in Han Nationality Chinese[1]

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Objective To investigate the association of ghrelin gene polymorphisms with metabolic syndrome in Han Nationality Chinese. **Methods** A total of 240 patients with metabolic syndrome and 427 adults aged above forty years were recruited. Genotypes were determined by polymerase chain reaction and restriction fragment length polymorphism analysis. **Results** The allelic frequency of the Leu72Met polymorphism was 17.3% in the patient group and 11.9% in the control group (χ^2=7.36, *P*=0.007). Metabolic syndrome was more prevalent among carriers of the Met72 variant (43.8 *vs* 33.1%, age- and sex-adjusted odds ratio=1.57, *P*=0.01). No Arg51Gln variants were found in our study subjects. **Conclusion** Rather than being associated with its individual components, Leu72Met polymorphism is associated with metabolic syndrome in the Han Nationality Chinese. Arg51Gln polymorphism is rare in the Han Nationality Chinese.

Key words: Ghrelin; Polymorphism; Metabolic syndrome; the Han Nationality

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