C677T

A retrospective analysis of baseline data from 2040 patients with hypertension and hyperhomocysteinemia (HHcy) included demographic characteristics, biomarkers, history of chronic diseases and lifestyle factors. Polymerase chain reaction-restriction fragment length polymorphism method was used to investigate the C677T polymorphism of MTHFR gene.

Pang et al. examined independent effects and interactions between sex and stratified factors on the risk of stroke by logistic regression model. A total of 1412 patients suffered a stroke, and the prevalence of stroke was 70.65% in men and 66.53% in women. Both men and women had independent risk factors for stroke, including diabetes mellitus, atrial fibrillation, smoking, increased level of systolic blood pressure (SBP) and plasma total homocysteine (tHcy), as well as the decreased level of high-density lipoprotein cholesterol. Diastolic blood pressure (DBP) -specific risk of stroke was unique to men. Interactions between sex and other risk factors on stroke risk were statistically significant: age, fasting plasma glucose (FPG), SBP, DBP, triglycerides (TG) and tHcy. Furthermore, tHcy interacted with age, SBP and DBP in men, and age, SBP, DBP, FPG, and TG in women to modulate the risk of stroke. Although TT genotype did not have an independent effect on stroke, it could interact with sex and FPG, TG and SBP to increase stroke. In conclusion, sex-specific differences are useful to stratify the risk of stroke and assist clinicians in the decision to select a reasonable therapeutic option for high-risk patients [1].

1)
Pang H, Fu Q, Cao Q, Hao L, Zong Z. Sex differences in risk factors for stroke in patients with hypertension and hyperhomocysteinemia. Sci Rep. 2019 Oct 4;9(1):14313. doi: 10.1038/s41598-019-50856-z. PubMed PMID: 31586136.