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Common variant rs7579169 is associated with preeclampsia in Han Chinese women

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ABSTRACT. As a heterogeneous group of disorders in pregnancy, many genetic factors are involved in the development of preeclampsia. The single nucleotide polymorphism (SNP) rs7579169, located on chromosome 2q14.2, has been shown to be associated with pregnancy-induced hypertension in Europeans. In this study, we examined whether the SNP rs7579169 is associated with the susceptibility to preeclampsia through a case-control research model in Han Chinese women. Genotypes of 145 patients with preeclampsia and 150 healthy pregnant subjects were identified by direct sequencing. The correlation between the rs7579169 genotype and the susceptibility to preeclampsia was evaluated using an unconditional logistic regression model. Although there were no differences of having the rs7579169 SNP between early onset and late onset preeclampsia, patients carrying the CT or TT genotype were more likely to develop preeclampsia than those carrying the CC genotype (CT *vs* CC: OR = 1.76, 95%CI = 1.07-2.87, $P < 0.05$; TT *vs* CC: OR = 5.03, 95%CI = 1.99-12.73, $P < 0.05$; CC *vs* CT + TT: OR = 2.05, 95%CI = 1.27-3.30, $P < 0.05$). In conclusion, although no differences of the rs7579169 SNP were identified between the early onset and late onset preeclampsia groups, we found that the CT or TT

genotype and the CT+TT genotype were significantly associated with an increased risk of preeclampsia in Han Chinese women.

Key words: Preeclampsia; rs7579169; Single nucleotide polymorphism

