

번호: OP-H-008					
제 목	뇌졸중에 GST 유전자 다형과 흡연이 미치는 효과 Effects of GST genetic polymorphisms and smoking on the risk of ischemic stroke				
저 자 및 소 속	박소연1),2), 이관희3), 이영배4), 나정호5), 최재철6), 배종면7), 홍윤철1),2) 1)서울대학교 의과대학 예방의학 교실, 2) 서울대학교 환경의학 연구소, 3)인하대병원 산업의학 교실, 4) 가천의과대학 신경학교실, 5) 인하대학교 의과대학 신경학 교실, 6) 제주대학교 의과대학 신경학 교실, 7) 제주대학교 의과대학 예방의학 교실 So-Yeon Park1),2), Kwan-Hee Lee3), Young-Bae Lee4), Jeong-Ho Rha5), Jae-Chul Choi6), Jong-Myun Bae7), Yun-Chul Hong1),2) 1)Department of Preventive Medicine, Seoul National University College of Medicine, 2) Institute of Environmental Medicine, SNUMRC, 3)Department of Occupational and Environmental Medicine, Inha University Hospital, 4)Department of Neurology, Gachon University College of Medicine, 5)Department of Neurology, Inha University College of Medicine, 6)Department of Neurology, Jeju University College of Medicine, 7)Department of Preventive Medicine, Jeju University College of Medicine				
분 야	역 학 [뇌심혈관계]	발 표 자	박소연 일반회원	발 표 형 식	구 연
<p>Stroke ranks as the third leading cause of death and a variety of risk factors have been reported including age, blood pressure, cholesterol etc. Among them, active cigarette smoking has been long recognized as a major risk factor for stroke. Glutathione-S transferases (GST) are phase II detoxification enzymes responsible for the metabolism of numerous xenobiotics and play a major cellular antioxidant role. We investigated the association between the GST M1/T1/P1 genetic polymorphisms and the risk for stroke, and examined potential interaction between these polymorphisms and cigarette smoking.</p> <p>Total 212 cases arrived in emergency room within 24 hours after stroke and 212 age-sex matched controls from the Incheon Health Examination Cohort were included in this study.</p> <p>The number of smokers was significantly higher in the case group than the control group. The smoking has shown to increase the risk for stroke twice in the analysis controlling for each polymorphism of GSTM1/P1/T1 and the significant interaction between GSTP1 polymorphism and smoking was observed. When considering the interaction between polymorphism and smoking by stratification, we found that subjects who were ever smokers with variant genotype had increased the risk for stroke for all three polymorphisms (GSTM1; OR, 2.486; 95% CI, 1.373-4.503; GSTT1; OR, 2.378; 95% CI, 1.256-4.503; GSTP1;OR, 3.534; 95% CI, 1.565-7.978).</p> <p>In conclusion, we found that smoking is the risk factor for stroke and the variant genotype of GSTM1/T1/P1 increased the risk in the smoker groups only. Our findings suggest that there is interactive effect between GST polymorphisms and smoking for the risk of stroke.</p>					