

암 I				번호: II - F - 5	
제 목	국문	우리나라 성인에서의 MTHFR 유전자 다형성과 음주량이 대장암 발병에 미치는 영향			
	영문	METHYLENETETRAHYDROFOLATE REDUCTASE POLYMORPHISM (MTHFR), ALCOHOL INTAKE AND RISKS OF COLON AND RECTAL CANCERS			
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<p>Objectives:</p> <p>5,10-Methylenetetrahydrofolate reductase (MTHFR), an enzyme in folate metabolism, was previously reported to be associated with a decreased risk of colorectal cancer. It has also been suggested that colon and rectal cancer might have different etiological factors. A case-control study was conducted to investigate the association of MTHFR polymorphism and heavy alcohol drinking to colon and rectal cancer separately.</p> <p>Methods:</p> <p>Cases were a consecutive series of patients with histologically confirmed, incident colorectal cancer who were admitted to two university hospitals in Seoul, Korea between 1998 and 2000. Controls were selected in the same hospitals as cases during the same periods. A total of 243 cases (colon 111, rectum 132) and 225 controls were surveyed.</p> <p>Results:</p> <p>After adjustment for potential covariates, MTHFR val/val (RR=0.9, 95% CI: 0.5-1.6) and val/ala (RR=1.1, 95% CI: 0.7-1.6) polymorphisms were not associated with the risk of colorectal cancer, compared with the wild type. The association with MTHFR polymorphism (val/val and val/ala combined vs ala/ala) was found to be different between colon cancer (RR=2.0, 95% CI: 1.1-3.5) and rectal cancer (RR=0.7, 95% CI: 0.4-1.1), with statistical</p>					

significance ( $p < 0.01$  for heterogeneity). The effect of heavy alcohol drinking (30+ g/day) appeared stronger for colon cancer (RR=2.7, 95% CI: 1.2-6.1) than for rectal cancer (RR=1.4, 95% CI: 0.7-3.0). There was no clear interaction of alcohol drinking and MTHFR polymorphisms on the risk of either colon or rectal cancer.

Discussions:

Our results suggest that pathways in carcinogenesis associated with MTHFR polymorphisms may differ in colon and rectal cancer.