



Association between *IL-1 β* , *IL-8*, and *IL-10* polymorphisms and risk of acute pancreatitis

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ABSTRACT. We assessed the possible correlation between genetic polymorphisms in interleukin (*IL*)-1 β , *IL*-8, and *IL*-10 and risk of acute pancreatitis. Polymorphisms of *IL*-1 β +3954C/T (rs1143634), *IL*-1 β -511C/T (rs16944), *IL*-8 -251T/A (rs4073), *IL*-10 -1082A/G (rs1800896), and *IL*-10 -819C/T (rs1800871) were assessed by polymerase chain reaction-restriction fragment length polymorphism. Patients with acute pancreatitis were more likely to have a family history of acute pancreatitis and a habit of tobacco smoking and alcohol drinking. Conditional logistic regression analyses showed that subjects carrying *IL*-10 -1082A/G and *IL*-8 -251 AA genotype with the A allele were significantly associated with an increased risk of acute pancreatitis, with adjusted odds ratio (95% confidence interval) of 1.82 (1.01-3.31) and 1.39 (1.02-1.90), respectively. However, we did not observe that *IL*-1 β +3954C/T, *IL*-1 β -511C/T, *IL*-10 -1082A/G, and *IL*-10 -819C/T polymorphisms were associated with the risk of acute pancreatitis. We found that the *IL*-8 -251T/A polymorphism is associated with an increased risk of acute pancreatitis, and no significant

association between *IL-1 β* and *IL-10* gene polymorphisms and risk of acute pancreatitis was detected.

Key words: Acute pancreatitis; Inflammatory cytokines; Polymorphism