Interleukin-10 gene promoter polymorphism and risk of liver cirrhosis

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ABSTRACT. We conducted a hospital-based case-control study to assess the association between IL-10-592 A/C, IL-10-819 C/T, and IL-10-1082 A/G polymorphisms and the risk of liver cirrhosis in a Chinese population. This 1:1-matched case-control study included 192 patients from the Chinese PLA General Hospital. Genotypes of IL-10-592 A/C, IL-10-819 C/T, and IL-10-1082 A/G were detected by polymerase chain reaction amplification-restriction fragment length polymorphism analysis. Conditional regression analysis showed that individuals carrying the IL-10-1082 G allele had an only slightly increased risk of liver cirrhosis, with an adjusted odds ratio (95% confidence interval) of 2.14 (0.97-1.68). However, we did not identify a significant association between polymorphisms in IL-10-592 A/C and IL-10-819 C/T and the risk of liver cirrhosis. These findings may provide important clues for future studies of early detection screening of liver cirrhosis.

Key words: Interleukin-10 gene; Liver cirrhosis; Polymorphism