

혈액투석 환자에서 Interleukin-6 -634 C/G와 174G/C의 유전자 다형성

이화여자대학교 신장내과

김 승 정 · 류 정 화

Interleukin-6 -634 C/G and -174G/C Polymorphisms in Korean Patients Undergoing Hemodialysis

Seung-Jung Kim, Jung-Hwa Ryu

Ewha Woman University

Background/Aims: Chronic inflammatory status is a possible risk factor for vascular access dysfunction in hemodialysis (HD) patients, but there are differences in individual susceptibility. IL-6 is a well-known inflammatory cytokine and has various polymorphisms. We were to determine whether or not IL-6 polymorphisms are associated with vascular access dysfunction in HD patients

Methods: Eighty HD patients were enrolled. Polymorphisms in the IL-6 gene promoter (-634C/G and -174G/C) by RFLP-PCR were studied. Vascular access patency was compared between the patient groups based on IL-6 polymorphisms. Eighty-nine healthy people were enrolled as a control. Plasma IL-6 levels were determined by ELISA.

Results: The GG genotype and G allele of the IL-6 -634 polymorphism were more frequent in the HD patients than the control. Furthermore, a higher frequency of the G allele was noted in the shorter access survival group compared to the longer survival group in non-diabetic patients. No correlation between the IL-6 -634 C/G polymorphism and plasma IL-6 levels was showed. The C allele of the IL-6 -174G/C polymorphism was not detected in our study population.

Conclusion: The IL-6 -634 G allele is a possible risk factor for end-stage renal disease and may be associated with vascular access dysfunction in HD patients.

Key Words: Interleukin-6유전자다형성, 혈액투석, 혈관통로
Interleukin-6 polymorphism, Hemodialysis, Vascular access