

Endothelin-1 Gene Polymorphism in Preoperative Myocardial Infarction with /or without Coronary Artery Bypass GraftSefa Senol¹, Ilker Akar², Kürsat Kargün³, Ali Bayram³, Murat Kara⁴ and Özlem Secen⁵¹*Department of Cardiovascular Surgery, Education and Research Hospital, Elazig, Turkey*²*Gaziosmanpasa University, School of Medicine, Department of Cardiovascular Surgery, Tokat, Turkey*³*Firat University, Elazig High School of Health Sciences, Elazig, Turkey*⁴*Mugla Sitki Kocman University, School of Medicine, Department of Genetic Medicine, Mugla, Turkey**Department of Cardiology, Education and Research Hospital, Elazig, Turkey**E-mail: ¹<ssenol2015@gmail.com>, ²<ilker.akar@gop.edu.tr> ³<kargun_@hotmail.com>, ⁴<abayram@firat.edu.tr>, ⁵<ozlemsecen@hotmail.com>, ⁵<ozlemsecen@hotmail.com>**³<abayram@firat.edu.tr>, ⁴<muratkara@mu.edu.tr>, ⁵<ozlemsecen@hotmail.com>***KEYWORDS** Endothelin-1. Gene Polymorphism. Myocardial Infarction. Coronary Artery Bypass Graft

ABSTRACT Atherosclerosis is a complex multifactorial and polygenic disorder resulting from endothelial dysfunction and excessive inflammatory response to various forms of injurious stimuli to the arterial wall. In this study, researchers aimed to investigate endothelin-1 (Lys198Asn and rs10478694) polymorphisms which are supposed to play roles in atherothrombotic process. Study group included 100 patients who had coronary artery bypass operation (CABG) without any history of a myocardial infarction with ST elevation (Group 1), and 80 patients who had a CABG operation after a myocardial infarction with ST elevation (Group 2). The control group consisted of 80 healthy people without coronary artery disease. Endothelin-1 gene polymorphisms of the subjects were determined by real time polymerase chain reaction method. Comparison of study groups, Groups 1 and 2, and control group (Group 3) did not show any statistically significant differences for endothelin-1 gene polymorphisms ($p>0.05$). The polymorphisms endothelin-1 gene which is thought to play a role in atherothrombotic process, were not supposed as risk factors in CABG patients. Studies on different polymorphisms of endothelin-1 gene may be beneficial.