



## Importance of *NPC1* Gene 644 A → G Mutation in Coronary Artery Disease

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**ABSTRACT** Coronary artery disease (CAD) is the most prominent cause of mortality worldwide. The basis of CAD pathogenesis is the occlusion of coroner vessels progressively due to atherosclerotic plaques. *NPC1* gene plays a critical role in the atherosclerosis progression. This study aimed to examine whether 644 A→G polymorphism of *NPC1* is associated with the risk of coronary artery disease in Turkish patients. In this case-control study, 200 persons were studied (100 patients and 100 controls). The 644 A→G polymorphism of *NPC1* gene is analyzed using polymerase chain reaction and restriction fragment length polymorphism methods. There was a significant relationship between the distribution of coronary artery disease and control group in terms of allele and genotype frequency ( $p=0.0002$ ) ( $p=0.003$ ), respectively. According to the researchers' results, 644 A→G polymorphism in *NPC1* gene can be one of the predisposition factor to coronary artery disease in Turkish population.