

homogenization process was carried out. Superoxide dismutase (SOD), Catalase (CAT) activities, Malondialdehyde (MDA) level and inflammation markers (IL-1 α , IL-1 β) were investigated in homogenizers.

Results: When the IL-1 α parameter in liver tissue was examined, when the control group and different doses of curcumin and naringenin were compared with CuNP, the level of IL-1 α decreased, this decrease was not statistically significant ($p > 0.05$). The IL-1 β parameter showed a statistically significant increase in the CuNP group compared to the control group ($p < 0.05$). IL-1 β level was decreased in different doses of curcumin and naringenin groups compared to CuNP group ($p < 0.05$).

Conclusions: It can be thought that curcumin and naringenin can be used for the protection and treatment against detrimental effects that may occur in case of exposure to copper nanoparticles in humans.

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References:

1. Tang H, Xu M, Luo J, Zhao L, Ye G, Shi F, Li Y (2019). *Environmental Sciences Europe*, 31(1):1-14.
2. Ravindran PN, Nirmal-Babu K, Sivaraman K (2007). *Turmeric: The golden spice of life. Turmeric: The Genus Curcuma*. FL, USA: CRC Press, Boca Raton.
3. Salehi B, Fokou PVT, Sharifi-Rad M, Zucca P, Pezzani R, Martins N, Sharifi-Rad J (2019). *Pharmaceuticals*, 12(1):11.

P180: AN INVESTIGATION ON THE ASSOCIATION BETWEEN ATP DEPENDENT POTASSIUM CHANNELS AND CORONARY ARTERY DISEASE

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Introduction: Coronary artery disease (CAD) is the most common cause of mortality and morbidity

worldwide driven by both genetic and environmental factors (1). Atherosclerosis, one of the major causes of coronary artery disease, is a complicated disease that begins to develop in early ages and is caused by cholesterol accumulation in the vein walls (2). Various genetic factors and environmental effects are accelerating the development. There are many reasons for atherosclerosis beginning early in life, resulting in coronary artery disease in middle age and later. Smoking, hypertension, hypercholesterolemia, diabetes, advanced age, familial predisposition are risk factors for atherosclerosis. It is important to determine the genetic background of the disease in order to be able to learn and take precautions against the presence or absence of the predisposition to coronary artery disease in terms of increasing the life span and quality of individuals (3). In the light of the available information, we aimed to investigate whether S422L polymorphism is associated with coronary artery disease in the KCNJ8 gene, which is thought to be a pathogenic risk factors.

Materials and Methods: In our study, individuals who applied to Mersin University Medical Faculty Hospital and Mersin State Hospital Cardiology Department, were diagnosed with coronary artery disease after coronary angiography ($n = 100$) and who were accepted as healthy after coronary angiography ($n = 100$) were included. Variation was determined using the Tetra-Primer ARMS PCR method.

Results: No significant relationships were found between the S422L polymorphisms and CAD in our study.

Conclusions: Our results does not support the hypothesis that KCNJ8 gene is associated with a significantly increased CAD risk, and point to S422L polymorphism as a possible hotspot mutation.

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References:

1. Bishop ML, Duben-Engelkirk JL, Fody EP (2000). *Clinical Chemistry, Principles, Procedures, Correlations*. 4th ed. New York, pp 429-430.
2. Gökdemir O, Palaoğlu KE (1993). Aterogenezin hücrenel ve moleküler biyolojisi, Kolesterol taşınması ve lipoprotein metabolizması. *İstanbul*, pp 4-5.
3. Bonetti PO, Lerman LO, Lerman A (2003). *Arterioscler Thromb Vasc Biol*, 23:168-175.