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Dear Sir,

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Dear Editor,

We read the article "Paraoxonase-1 activity and the levels of lipids and lipid peroxidation markers in arterial versus venous blood samples in coronary angiography patients" written by Göçmen *et al.* with great interest [1]. The authors aimed to explore whether arterial blood samples withdrawn from femoral arteries can be used to determine some biochemical parameters.

Coronary artery disease (CAD) is the leading cause of death worldwide [2]. Oxidized low-density lipoprotein (ox-LDL) is accepted to be a key factor of initiating and accelerating atherosclerosis. High-density lipoprotein-associated proteins like paraoxonase 1 (PON1) enzyme prevent lipid oxidation. Paraoxonase 1 hydrolyzes lipid peroxides in atherosclerotic lesions, where they promote progression of atherogenesis. Coronary artery disease is associated with decreased plasma PON1 activity [3]. Göçmen et al. [1] showed that arterial blood samples can also be used to determine these parameters as well as venous samples. This is an interesting study. On the other hand, we would like to make a minor criticism about the methodological aspect.

Blood samples were withdrawn at 8 am, after 12 h of fasting, from the femoral artery and vena mediana cubiti at the same time. However, it is impossible to perform all the coronary angiographies at the same time. It would be better if the authors explained this issue.

References

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On behalf of the author group, we would hereby like to thank Demirkol et al. for their valuable comments. In our previous study [1], we reported the relationship among various risk factors evaluated in venous blood samples of study participants who underwent coronary angiography for the presence of coronary artery disease (CAD). In this study [2] our aim was to determine whether arterial blood samples withdrawn from femoral arteries during standard Judkin's technique could be used for the evaluation of some biochemical parameters in CAD patients and controls. For practical reasons, the fasting blood samples of 73 CAD patients and 50 controls were obtained just before coronary angiography starting from 8 o'clock in the morning. Attention was paid to collecting arterial and venous blood samples of each person at the same time in the morning after a 12 h fast.

References

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