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LETTER TO THE EDITOR

Alterations in paraoxonase-1 activity

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Letter to the Editor

We read with a great interest the article by Yildirim, et al (1), entitled "Cu/Zn-superoxide dismutase, paraoxonase and arylesterase activities and malondialdehyde levels in patients with familial mediterranean fever".

They found no statistically significant differences in the serum levels of ESR, CRP, Cu/Zn-SOD, MDA and PON-1 between the groups observed and serum ARE activity was significantly decreased in the patients with FMF compared to the control subjects. They concluded, according to these findings, that alterations could be observed in lipid peroxidation and antioxidant defense mechanisms in patients with FMF during attack-free periods.

A decrease in serum PON1 activity may occur as part of an inflammatory response. Chronic decrease in PON1 activity increase a susceptibility to atherosclerosis but more acute declines due to some intercurrent acute inflammatory condition could exacerbate LDL oxidation (2).

Low serum PON1 activity independent of genotype has been reported in diseases, which are known to be associated with coronary heart disease (CHD), such as diabetes mellitus, hypercholesterolemia and renal failure (3).

In addition, it has been reported that lipid-lowering drugs and fibric acid derivatives could raise serum PON1 activity (4).

In conclusion; if details of patients such as history of diseases (coronary artery disease, renal failure, diabetes, hypertension), medication (lipid-lowering drugs, fibric acid derivatives), an inflammatory status and smoking habits were given, this study could have been more valuable.

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