Atherosclerosis is a chronic inflammatory disease of the vessel wall, characterized by local and systemic immune responses with involvement of both innate and adaptive immunity (1). Oxidized low-density lipoprotein (oxLDL), incorporating a diversity of oxidatively modified lipids and proteins, is considered as an important determining factor in the pathogenesis of atherosclerosis. OxLDL has many effects on the process of atherosclerosis, including aggravates defective endothelium-mediated vasodilation, chemokine production, endothelial adhesion molecule expression, and recruitment of monocytes to the site and foam cell formation. It also stimulates migration and proliferation of smooth muscle cell in favor of thrombosis (2,3).

We read with interest the recently published article entitled “Serum ox-LDL level is reduced with the extent of stenosis in coronary arteries” by Najafi et al (4) in Acta Medica Iranica. This article explained the relationship between serum ox-LDL level and the extent of stenosis in coronary arteries.

There are some points about this article, which should be discussed. The authors only studied the relationship or association between ox-LDL level and the extent of stenosis, while neither intervention nor follow-up was made; so, they did not study any change of ox-LDL level; and therefore the title does not fit what was presented in that article. The second interesting point is that the serum ox-LDL level in the control group was significantly higher than patients and the ox-LDL/LDL ratio was conversely correlated with the extent of stenosis, compared to the controls (P<0.05). In the discussion, the authors mentioned that their patients were taken lipid lowering medications. They also noted that the medications did not reduce the serum LDL level in patients, compared to controls; so, they concluded that the reduced ox-LDL is not related with drugs used by patients. However, earlier studies showed that there is a marked reduction of ox-LDL in patients with carotid atheromatosis treated with atorvastatin (5). Interestingly, these studies showed that statins can decrease level of ox-LDL significantly, independent to lowering LDL-C and TC (6). So, the ox-LDL lowering effect of atorvastatin independent to cholesterol lowering effect could be an appropriate explanation for the differences which have seen between controls and cases and between different groups of cases, while the authors should control the effects of statins on their patients.

References