

Author`s Reply

To the Editor,

We thank the authors for their great interest in our work entitled "Relationship between extent and complexity of coronary artery disease and different left ventricular geometric patterns in patients with coronary artery disease and hypertension" that was published in the October 2015; 15: 789-794 issue of the *Anatol J Cardiol* (1). As reported, we found that the SYNTAX score is independently related with the LV geometry in patients with hypertension. Moreover, this result demonstrates that LV remodeling is parallel to the increase in the extent and complexity of CAD in our study patients (1). We discussed several mechanisms to explain the study results. We mentioned that in particular, the renin-angiotensin-aldosterone system can be the most important mechanism. Angiotensin II and angiotensin II type 1 receptor activation promote intracellular reactions that may lead to both cardiac hypertrophy and the progression of complex atherosclerotic lesions through the proliferation of vascular smooth muscle cells and the production of extracellular matrix protein (2). Furthermore, we discussed that oxidative stress contributes to the progression of atherosclerosis in patients with hypertension having different LV geometries (3).

As mentioned in the letter, IR and proinflammatory state have been reported to be associated with the LV growth and CAD in patients with hypertension (4, 5). However, we did not measure IR and any inflammatory marker. Furthermore, although we examined the hospital data, we did not find any values for these parameters. Measuring IR and inflammatory marker levels could provide insights into the pathogenesis of different LV geometries and its relationship with CAD severity in patients with hypertension. Further studies can be designed to determine the effects of IR and inflammatory markers for these patients.

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