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Author`s Reply

To the Editor,

We would like to thank the authors of the letter for their interest and criticism about our study published in February issue of The Anatolian Journal of Cardiology 2014; 14: 55-60 (1). The relation between ABO blood groups and coronary artery disease is known for many years. But, there are no adequate information about the causes of relation between ABO blood groups and coronary artery diseases. In our study, we tried to discuss the relation between ABO blood groups and the development of coronary artery diseases, also we discussed the mechanism of coagulation attributing vWF and lipid metabolism of ABO blood groups (1). The author summarized the relation between blood groups and CAD in different races (2-5) and wanted our explanation of what might be the causes of variations between our study and the other studies. First of all, it is known that risk factors in the development of coronary artery diseases are different in different races. These differences are claimed to be both genetic and environmental reasons. We think that the variations between these studies and our study as well as these studies each other could be related to both genetic and environmental reasons. Secondly, authors wanted to learn the relation between lipid levels and ABO blood groups. We have re-analyzed our data and HDL (41±12 vs. 40±14), LDL (93±37 vs. 87±36), TG (135±128 vs. 129±131) did not differ between 0 and non 0 groups. However, Chen et al. (3) determined a significant relation between ABO blood groups and lipid levels as noted by the authors. We can list the possible causes of these differences: Both studies were conducted in different races (Turkish vs Chinese), while there were more than 6 thousand patients in the Chen et al. (3) study, there were about 500 patients in our study. In addition in our study 15-20% patients had a history of statin use. All these reasons may explain the differences between the two studies.

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Relation of ABO blood groups to coronary lesion complexity in patients with stable coronary artery disease

To the Editor,

In the past decades, several studies have suggested the possibility of ABO blood groups antigens to participate in pathogenesis of coronary artery disease (CAD), especially acute myocardial infarction and sudden cardiac death (1-3). Association between ABO blood groups and stable CAD has been significantly less investigated. That is why we read the paper of Kaya et al. (4) published in The Anatolian Journal of Cardiology 2014 ; 14 : 55-60 with particular interest, as it is in an important segment associated with our research published several months ago (5).

Contrary to the study by Kaya et al. (4) no association between ABO blood groups and the extent of coronary atherosclerosis in our study was observed. In our opinion, although very similar in the initial idea, our studies have different results, possibly the consequence of the different methodologies used in the atherosclerotic lesions assessment. Contrary to our study, in which the main indicator of CAD severity was the extent of coronary atherosclerosis assessed by modified Gensini scoring system (GS), in the study by Kaya et al. (4) the indicator of CAD severity was complexity of coronary lesions assessed by SYNTAX score (SS).

The SS has been developed as a useful predictor for the outcome of patients undergoing multi-vessel percutaneous coronary intervention, and provides a possibility for choosing optimal revascularization strategies for patients with complex coronary artery disease. This scoring system includes only diameter stenosis ≥50% in vessels ≥1.5 mm long. This is the main difference between the SS and the GS. The GS includes all grades of the narrowing in all cardinal epicardial vessels, including diagonal and obtuse marginal branches, taking into consideration the lesion's position in the coronary arterial tree. For example, an SS patient with five 49% lesions on the proximal segments of all the main epicardial coronary arteries, middle segments of the left anterior descending and right coronary artery, has no complex coronary artery disease so he/she could be excluded from the mentioned study (4). At the same time, according to the GS, this patient would be recognized as the patient with significant atherosclerotic changes (GS=20) and would be included in the analysis.

In that context, the 342 patients excluded from the study by Kaya et al. (4) despite SS=0, might have numerous significant atherosclerotic changes in their coronary arteries. In that case SS=0 only suggests these patients are not yet candidates for coronary interventions. Therefore, it would be very interesting to know if the distribution of the

ABO blood groups in the group of SS=0 patients is equal to the distribution in SS=1-3 groups and how inclusion of that group in an analysis would influence the results of the presented study. If the O blood group really dominates in the non-CAD patients and patients with less complex CAD, we could expect significantly more patients with O blood group in this, relatively large group of excluded patients.

However, despite the mentioned differences, our two studies can be observed together as a significant contribution in investigation of pathophysiological link between ABO blood groups antigens and stable CAD. Different results obtained and conclusion drawn by different methodologies used in assessment of coronary atherosclerotic changes should be tested in the future prospective studies.

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Author`s Reply

To the Editor,

First of all we would like to thank the authors for their valuable comments for our article published in February issue of The Anatolian Journal of Cardiology 2014; 14: 55-60 (1). As known, there is a close relationship between ABO blood groups and development of coronary artery disease. Many researches have been done to reveal the relationship between ABO blood groups and the development of coronary artery disease so far. Some of these researches have conflicting results. We believe that one of the most important reasons for the conflicting results is methodology. For example, there could be different results between a prospective study investigating the relationship between ABO blood groups and development of coronary artery disease with a retrospective/cross sectional study investigating relationship between ABO blood groups and angiographic coronary artery disease. Besides definition and assessment of the coronary artery disease is significantly different in between the manuscripts. Some studies included stable coronary artery disease and some acute coronary syndrome. Similarly, some authors accepted as angiographic coronary artery diseases as who have coronary lesions more than 50%, whereas some accepted as coronary lesions more than 25%. However, theoretically the basic way of the assessment of the coronary artery disease in an individual is intracoronary imaging (IVUS, OCT). We have used SYNTAX score, on the other hand, the authors assessed the coronary artery disease by Gensini score (1, 2). Although these two scores have been utilized in the assessment of the coronary artery disease, there are some differences as the authors defined. Besides, while the Gencini score reveals mostly the extent of the coronary artery disease, the SYNTAX score reveals mostly the complexity of the coronary artery disease (3). For that, while the Gencini score is mostly utilized for prognostic purpose, the SYNTAX score is mostly utilized in the determination of the treatment modality. The main aim of the our study was to investigate the association between the ABO blood groups and coronary artery disease complexity, as well as to show the importance of the blood group while determining the treatment modality. The authors suggested to include patients with a SYNTAX score =0 and reanalyze. We did not do this analysis for two reasons. Firstly, we did not collect data of the patients with SYNTAX score=0. Secondly, the aim of the our study to investigate the association between the ABO blood groups and coronary artery disease complexity, not investigate the association between the ABO blood groups and coronary artery disease presence.

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Strict patient selection for renal sympathetic denervation may yield to more favorable results

To the Editor,

We read with a great interest the article by Drexel et al. (1) entitled as "Renal denervation-Review" that published recently in this journal. Renal sympathetic denervation (RSD) opened a new era in the treatment of