Author`s Reply

To the Editor,

We thank the author for their interest in our studies and results and for bringing up this point. As the author has mentioned, shunt operations are challenging procedures in congenital patients because it is difficult, if not impossible, to predict short- and long-terms performance in specific patients (1-3). Thus, patient-specific surgical planning and decision making for shunt configuration (location, diameter, and type) are crucial for the success of surgery (3-6). In our study (7), we have investigated in detail the performance of shunt configurations in terms of pulmonary flow rates, energy (pressure) loss, and blood damage (hemolysis). Moreover, we have studied the effect of pulmonary artery diameter and pulmonary vascular resistance on pulmonary flow rates. Tables 2 and 6 present the right, left, and total pulmonary artery perfusion calculations. In the "Flow splits" subsection of the Results section, flow preference has been discussed on the basis of shunt configuration, pulmonary artery diameters, and pulmonary vascular resistance.

In the Discussion section, flow preferences have been discussed on the basis of pulmonary resistance, shunt anastomosis angle, and pulmonary artery sizes.

Furthermore, in the Conclusion section, we have suggested that the anastomosis angle between the shunt and pulmonary artery has a crucial effect on flow splits directed to the pulmonary arteries. The shunt angle should not be directed toward the narrow pulmonary artery (right or left) since total pulmonary flow rates decrease. Furthermore, vertical anastomosis configurations increase total pulmonary perfusion; thus, these configurations are preferable compared with leaned anastomosis shunt configurations.

We, hereby, thank again the author for their fruitful discussions. They have summarized shunt surgery planning based on previous literature and our current paper. They have also emphasized the importance of the topic and remarked the place of our current paper among the surgical planning literature.

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Value of ATRIA risk score and gender in predicting adverse events in patients with myocardial infarction

To the Editor,

I have read the article by Çetinkal et al. (1) entitled "Comparative performance of AnTicoagulation and Risk factors In Atrial fibrillation and Global Registry of Acute Coronary Events risk scores in predicting long-term adverse events in patients with acute myocardial infarction" with great interest, which was published in Anatol J Cardiol 2018; 20: 77-84. In their study, the authors divided 1627 patients with acute myocardial infarction into three risk groups according to ATRIA risk score: ATRIA 0, ATRIA 1-2, and ATRIA >3. They reported that ATRIA risk score >3 was found to be an independent predictor of major adverse cardiac events in this group. This is a well-written study, and I would like to draw attention to the gender-related differences that can affect the results of the present study.

Çetinkal et al. (1) reported that ATRIA risk score >3 had a predictive value for major adverse cardiac events in patients with acute myocardial infarction. As female gender represents 1 point in ATRIA risk score, I think that gender becomes a more important factor in this study population. In the present study, none of the patients in ATRIA 0 group and 18.7% of the patients in ATRIA 1-2 group were females, while 38.1% of the patients in ATRIA >3 group were females. It has been shown that female patients have a higher risk for poor outcomes in acute myocardial infarction than male patients (2). Moreover, it has been described that psychological pathologies and social problems like depression, anxiety, and anger are possible risk factors associated with poor outcomes in female patients with cardiovascular diseases (3). It has also been demonstrated that pre-conditioning and pre-infarction angina is related with decreased left ventricular systolic function in males with acute coronary syndrome compared with that in females (4). In conclusion, because 38.1% of the study population in ATRIA >3 group are females, to verify whether the ATRIA risk score provides an additional risk stratification beyond that provided by conventional risk scores, gender-related factors should be taken into consideration in the present study.

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Author`s Reply

To the Editor,

We would like to thank the reviewers for their valuable and constructive comments related to our article entitled "Comparative performance of Anticoagulation and Risk factors In Atrial fibrillation and Global Registry of Acute Coronary Events risk scores in predicting long-term adverse events in patients with acute myocardial infarction" which was published in Anatol J Cardiol 2018; 20: 77-84 (1). Although we agree that female gender is a risk factor for major adverse cardiovascular events after acute myocardial infarction (AMI), advanced age is the predominant risk factor for both cardiovascular and cerebrovascular diseases and an independent predictor of poor outcomes, as mentioned in our study (2). Even though female gender is assigned 1 point in ATRIA risk score, age is more profoundly represented in this scoring system (i.e., 6 points for age >85 years, 5 points for age 75–84 years, 3 points for age 65–74 years). It is a fact that elderly patients have a poorer prognosis after AMI due to not receiving evidence-based medical therapy, increased risk of bleeding, lower rate of undergoing CAG and/or PCI, delay in hospital admission, higher prevalence of comorbidities such as renal and hepatic insufficiency, heart failure, hypertension, DM, and their vulnerable health status (2, 3). Age was a major risk factor for ATRIA RS, which explains its appropriateness for risk stratification in patients with AMI. In addition, we performed a subgroup analysis involving only male patients in which ATRIA >3 was still an independent predictor of prognosis (hazard ratio 1.90, 95% confidence interval 1.38–2.62, p<0.001). In our recent study, we showed that there were no in-hospital and 30-day mortality differences between male and female octogenarian patients after AMI. However, female octogenarian patients had poorer outcomes than male patients at long-term follow-up (4).

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