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Author's reply

Dear Editor,

Dr. Ali discusses thromboembolic events in myocardial noncompaction patients with complementary information and references which supplement our article. In the letter, there is no specific question to be answered regarding our case.

We appreciate the author for sharing this comprehensive information. Although routine use of anti-

coagulation in myocardial noncompaction patients is not well-documented, we use warfarin for six months due to apparent risk for cerebral thromboembolism. In our case, left ventricular ejection fraction was slightly decreased (45%) and remained unchanged during the follow-up. The patient has been asymptomatic for a year after cessation of warfarin.

Sincerely,

On behalf of the authors,

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Tissue Doppler evaluation of the effects of major lung resection on cardiac functions

Dear Editor,

We read with interest the article by Çölkesen et al.^[1], which is the first study in the literature evaluating cardiac functions by tissue Doppler echocardiography in the early postoperative period of major lung resection (up to 3 months).

We want to comment on some weak points about the inclusion and exclusion criteria of the patients.

1. In the Methods section, it is clearly stated that patients with diastolic dysfunction were excluded. However, data in Table 2 for preoperative echocardiographic findings include the following:

- Mitral diastolic velocities (E velocity 90 ± 23 cm/sec, A velocity 92 ± 23 cm/sec)
- Tricuspid diastolic velocities (E velocity 67 ± 13 cm/sec, A velocity 65 ± 19 cm/sec).

Tissue Doppler diastolic parameters:

- Mitral annulus (E' 9 ± 2 cm/sec, A' 10 ± 2 cm/sec)
- Tricuspid annulus (E' 9 ± 2 cm/sec, A' 15 ± 3 cm/sec)

When we analyze these data, we see that the mean values of E and A are close to each other for both mitral and tricuspid diastolic velocities, and the mean value of E' is smaller than A'.

Based on these findings, we consider that the patients meet the criteria for stage II diastolic dysfunction (pseudonormal pattern).^[2,3] Therefore, we want the authors to define the method they used to exclude diastolic dysfunction, other than they mentioned in the article.

2. The authors state that patients with an FEV₁/FVC ratio less than 0.60 were excluded to avoid right heart modifications related to "severe" chronic obstructive pulmonary disease (COPD). However, it is known that the presence of airflow limitation is defined by a postbronchodilator FEV₁/FVC <0.70.^[4] According to the criteria for staging the severity of COPD, the FEV₁ value must be used. The spirometric classification based on FEV₁ for the severity of COPD includes four stages:^[4-6]

Stage I: Mild (FEV₁/FVC <0.70 and FEV₁ $\geq 80\%$ predicted)

Stage II: Moderate (FEV₁/FVC <0.70 and $50\% \leq$ FEV₁ <80% predicted)

Stage III: Severe (FEV₁/FVC <0.70 and $30\% \leq$ FEV₁ <50% predicted)

Stage IV: Very severe (FEV₁/FVC <0.70 and FEV₁ <30% predicted or FEV₁ <50% predicted plus chronic respiratory failure).

For this reason, to avoid right heart modifications related to severe COPD, we suggest that the authors use FEV₁ values for exclusion of severe COPD (stage III and IV).

Sincerely,

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Author's reply

Dear Editor,

We would like to thank the authors for their commentary on our manuscript. Below are our responds to the points that were raised.

1. Our study was based on patient by patient selection and assessment. It was not a case control study. Therefore, there was no healthy control group with normal values. As mentioned in the Methods section in line 3, we excluded the patients with a previous history of diastolic dysfunction.

Guidelines recommend to use the septal E/E' ratio.^[1] A ratio of less than 8 is usually associated with normal left ventricular filling pressures, whereas a ratio of greater than 15 is associated with increased fill-

ing pressures.^[2] When the value is between 8 and 15, other echocardiographic indices should be used. A number of recent studies have noted that, in patients with normal ejection fraction, lateral tissue Doppler signals (E/E' and E'/A') show the best correlations with left ventricular filling pressures and invasive indices of left ventricular stiffness.^[3,4] These studies favor the use of lateral tissue Doppler signals in this population. Therefore, we preferably used the average E' velocity obtained from the septal and lateral sides of the mitral annulus for the prediction of left ventricle filling pressures.

We cautiously concluded that diastolic functions were affected after major lung surgery in order not to imply a false statement.

2. It is true that we did not use FEV₁ values for exclusion of severe COPD patients with stage III and IV. In our study group, the mean predicted values of FEV₁, FVC, and FEV₁/FVC were 2.2±0.7 l, 3.3±1 l, and 71±8%, respectively.

Sincerely,

On behalf of the authors,

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