variation in diameter of the inferior vena cava (IVC); an IVC diameter <2.1 cm that collapses >50% with a sniff suggests a normal RAP of 3 mm Hg (range, 0–5 mm Hg), whereas an IVC diameter >2.1 cm that collapses <50% with a sniff suggests a high RAP of 15 mm Hg (range, 10–20 mm Hg). In scenarios where the IVC diameter and collapse do not fit this paradigm, an intermediate value of 8 mm Hg (range, 5–10 mm Hg) may be used. The EACVI recommends such an approach rather than using a fixed value of 5 or 10 mm Hg for sPAP estimations (4).

In the study by Tudoran et al. (1), it was not stated whether the diameter and respiratory variation of IVC were evaluated to estimate sPAP. Therefore, I think that it would be more appropriate if these parameters were evaluated as factors in the assessment of sPAP in female patients with hyperthyroidism.

In conclusion, TTE proved to be a reliable method for the assessment of sPAP, being well suited to establish a non-invasive diagnosis of PH (5). However, the diameter and respiratory variation of IVC should be taken into account while assessing sPAP rather than using a fixed value of 5 or 10 mm Hg for RAP estimations.

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References


Author’s Reply

To the Editor,

The authors sincerely thank the colleague from Turkey for his interest in the original article entitled “Echocardiographic evolution of pulmonary hypertension in female patients with hyperthyroidism” published in September 2018 in the Anatolian Journal of Cardiology (1) and we value his appreciation.

We revealed an increased prevalence of pulmonary hypertension in patients with hyperthyroidism through a thorough echocardiographic evaluation of these patients, because we have always considered the cardiovascular complication associated with this pathology as a very interesting and important topic.

We determined the estimated systolic pulmonary artery pressure (sPAP) by transthoracic echocardiography, according to guideline recommendations (2, 3), based on the peak tricuspid regurgitation and taking into account the right atrial pressure (RAP). We regret that it was not clearly stated how we estimated RAP in the methods section of our article (1). For sPAP assessment, we relied on the determination of inferior vena cava (IVC) diameters as well as on its respiratory variations; an IVC diameter <2.1 cm that collapsed >50% with a sniff suggested a normal RAP of 3 mm Hg, whereas an IVC diameter >2.1 cm that collapsed <50% with a sniff or <20% on inspiration suggested a high RAP of 15 mm Hg.

We agree with our colleague that the diameter and respiratory variations of IVC are more accurate for the estimation of RAP while assessing PAPs, rather than the use of fixed values of 5 or 10 mm Hg.

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References

1. Tudoran C, Tudoran M, Vlad M, Balas M, Pop GN, Parv F. Echocardiographic evolution of pulmonary hypertension in female patients with hyperthyroidism. Anatol J Cardiol 2018; 20: 174-81. [CrossRef]


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