

It must be pointed out that we are not advocating TTE as a complete TEE replacement. For most cases in our center, the two methods are interchangeable. For a few complex cases, we still use TEE as a guiding tool. All of this also depended on the experience level of operators and sonologists. We think that this may be the reason why some scholars do not accept our method.

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## Author's Reply [ARTICLE IN PRESS]

To the Editor,

First of all, we agree with the author's opinion. We also think that the accuracy of transesophageal echocardiography (TEE) is greater than the accuracy of transthoracic echocardiography (TTE) in assessing the anatomical structure of an atrial septal defect (ASD). The most important reason is that the TEE probe was adjacent to the left atrium, which may allow us to get a better view of ASD. As the author emphasized and other papers reported, TEE provides more information regarding the exact morphology of the ASD, such as the size, position in the interatrial septum, and adequacy of septal rims (1, 2).

However, it does not mean that TEE is to be used as the only guiding tool for the device closure of ASD. Perhaps because of the lean physique of southern Chinese people, we found that TTE can achieve satisfactory imaging and be used as a guiding device in the ASD closure. With the help of an experienced sonologist, the TTE guidance can also provide an accurate measurement of many parameters from the apical four-chamber view, the parasternal long-axis view, and the subxiphoid acoustic window, which can determine the maximum diameter of the defect and complete the procedure.

In the early stage, we mainly carried out transthoracic device closure of ASD, and we also reported the experience with regard to such cases with deficient rims, which were completed by the TTE guidance (3, 4). With the accumulation of experience, we gradually developed a transthoracic device ASD closure guided by complete TTE. We have also found that some other scholars also support our opinion, using TTE as a guiding tool for device closure of ASD (5, 6). Our ultimate idea was to "one-stop shop" complete all kinds of ASD treatments.

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