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Author`s Reply

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 transtheter 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.

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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Echogenicity and echocardiographic guidance

To the Editor,

We have read with great interest the article entitled "Transcatheter device closure of atrial septal defects guided completely by transthoracic echocardiography: A single cardiac center experience with 152 cases" published in Anatol J Cardiol 2018; 20: 330-5 by Chen et al. (1). In their study, they reported that lone echocardiographic guidance with transcatheter device closure of atrial septal defects is safe and effective as fluoroscopic and echocardiographic guidance together. I have made the following comments and concerns.

When we compare the groups, the ages ranged from 3 to 75 years for group I and from 4 to 60 years for group II. Echogenicity is the major concern in both echocardiographic assessment and guidance especially in the older patient population. We

wonder if the researchers randomly assigned the patients into the groups, or if there was a selection bias driven by mostly echocardiographic echogenicity. Although in the Methods section they mentioned that obese patients were excluded due to the vague transthoracic echocardiography acoustic window, they did not report this issue in the selected population. Therefore, the authors should address the above-mentioned concern in their paper. In conclusion, good echogenicity makes sole echocardiographic guidance a good alternative to both fluoroscopic and echocardiographic guidance, especially in the younger patient population. However, before the planned procedure, the operator should define the best candidate for this option.

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Author`s Reply

To the Editor,

In our study (1) limitations, we had already shown that the number of cases was small, and there may have been selection bias. In addition, this was a retrospective rather than a randomized controlled prospective study. All these shortcomings limited the value of the article. Whether such method can be successfully completed depended mainly on the images provided by transthoracic echocardiography (TTE). Perhaps because of the lean physique of the southern Chinese people, we found that using TTE could achieve satisfactory imaging for guiding device closure of atrial septal defect for most of the cases in our study. Meanwhile, some other papers supported the idea on device closure of ASD guiding by complete TTE (2, 3). However, for a few complex cases with poor images by TTE, we still used transesophageal echocardiography as the guiding tool. It is important to emphasize that we do not want to claim that the transthoracic method can replace the transcatheter method. The transthoracic method can be used as an alternative for those patients who are unable or unwilling to be exposed to radiation.

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