

Address for Correspondence: Dr. Ahmet Güner,
İstanbul Kartal Koşuyolu Yüksek İhtisas Eğitim ve
Araştırma Hastanesi,
Kardiyoloji Kliniği;
Denizer Caddesi No:2 Kartal,
İstanbul- *Türkiye*
Phone: +90 505 653 33 35
E-mail: ahmetguner489@gmail.com
©Copyright 2019 by Turkish Society of Cardiology - Available online
at www.anatoljcardiol.com
DOI:10.14744/AnatolJCardiol.2018.80707



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.

Qiang Chen, Hua Cao, Gui-Can Zhang, Liang-Wan Chen,
 Heng Lu, Ling-Li Yu
Department of Cardiovascular Surgery, Union Hospital, Fujian Medical University; Fuzhou- *China*

References

1. Taniguchi M, Akagi T, Kijima Y, Sano S. Clinical advantage of real-time three-dimensional transesophageal echocardiography for transcatheter closure of multiple atrial septal defects. *Int J Cardiovasc Imaging* 2013; 29: 1273-80. [CrossRef]
2. Johri AM, Witzke C, Solis J, Palacios IF, Inglessis I, Picard MH, et al. Real-time three-dimensional transesophageal echocardiography in patients with secundum atrial septal defects: outcomes following transcatheter closure. *J Am Soc Echocardiogr* 2011; 24: 431-7. [CrossRef]
3. Chen Q, Cao H, Zhang GC, Chen LW, Chen DZ. Safety and feasibility of intra-operative device closure of atrial septal defect with transthoracic minimal invasion. *Eur J Cardiothorac Surg* 2012; 41: 121-5.
4. Chen Q, Chen LW, Cao H, Zhang GC, Chen DZ, Zhang H. Intraoperative device closure of atrial septal defects with inferior vena cava rim deficiency: a safe alternative to surgical repair. *J Thorac Cardiovasc Surg* 2011; 141: 631-6. [CrossRef]
5. Li GS, Kong GM, Ji QS, Li JF, Chen YG, You BA, et al. Reliability of transthoracic echocardiography in estimating the size of Amplatzer septal occluder and guiding percutaneous closure of atrial septal defects. *Chin Med J (Engl)* 2008; 121: 973-6. [CrossRef]
6. Chen FL, Hsiung MC, Hsieh KS, Li YC, Chou MC. Real time three-dimensional transthoracic echocardiography for guiding Amplatzer septal occluder device deployment in patients with atrial septal defect. *Echocardiography* 2006; 23: 763-70. [CrossRef]

Address for Correspondence: Qiang Chen, MD,
Department of Cardiovascular Surgery,
Union Hospital,
Fujian Medical University,
Xinquan Road 29# 362000
Fuzhou- *China*
Phone: +861 379 937 62 16
E-mail: chenqiang2228@163.com
©Copyright 2019 by Turkish Society of Cardiology - Available online
at www.anatoljcardiol.com

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