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Research Letter

Eustachian valve - Masquerading ASD rim



Keywords:

Eustachian valve

Atrial septal defect

Echocardiography

A 34-year-old male presented with shortness of breath on moderate exertion since 2 months. Electrocardiogram was suggestive of right axis deviation and right bundle branch block. Transthoracic echocardiographic evaluation reported atrial septal defect (ASD) with left to right shunt. Qp:Qs was 2:1. Size of the defect reported was 21 mm. The patient was referred to our center for ASD device closure. Before undergoing device closure procedure, transesophageal

echocardiography (TEE) was performed. Bicaval TEE view showed ASD of 21 mm with adequate superior and inferior rims (Figs. 1 and 2). However midesophageal 4-chamber view showed defect size of 24 mm with inadequate inferior rim. Midesophageal bicaval view was again performed with slight rotation of the probe and it revealed large eustachian valve (Fig. 3). Free end of eustachian valve was initially confused with superior rim of ASD. The same view with probe manipulation depicted true superior rim of ASD and inadequate aortic rim. Rim size less than 5 mm in anterior, inferior, or superior aspects of the ASD can potentially cause complications of device closure procedure.^{1–3} Considering deficient ASD rim, device closure procedure was abandoned and the patient was scheduled for surgical defect closure. Comprehensive transesophageal echocardiographic examination is essential as large eustachian valve can be easily mistaken for atrial septal rim as in the present case. ASD was surgically closed with dacron patch in this patient. Postoperative course of the patient remained stable.

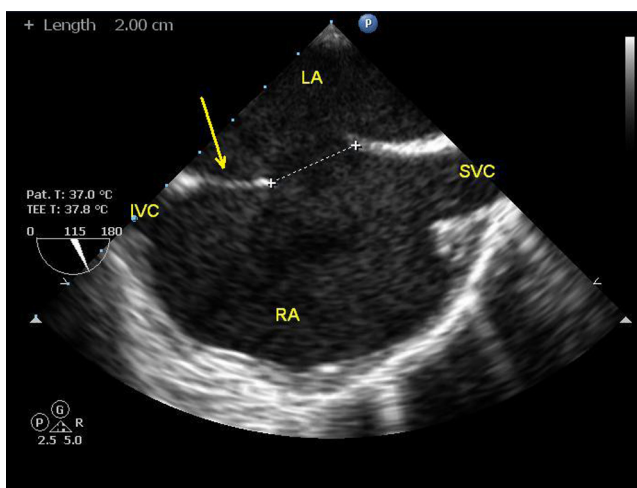


Fig. 1 – Midesophageal bicaval view showing eustachian valve (marked by yellow arrow) mistaken as superior rim of ASD.

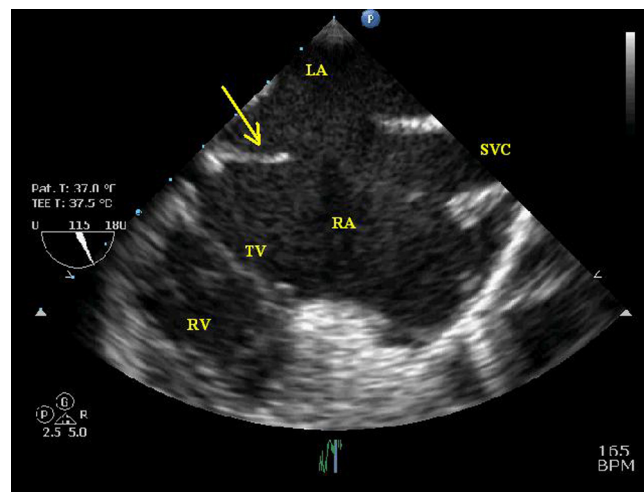


Fig. 2 – Midesophageal modified bicaval view showing eustachian valve (marked by yellow arrow) mistaken as superior rim of ASD.

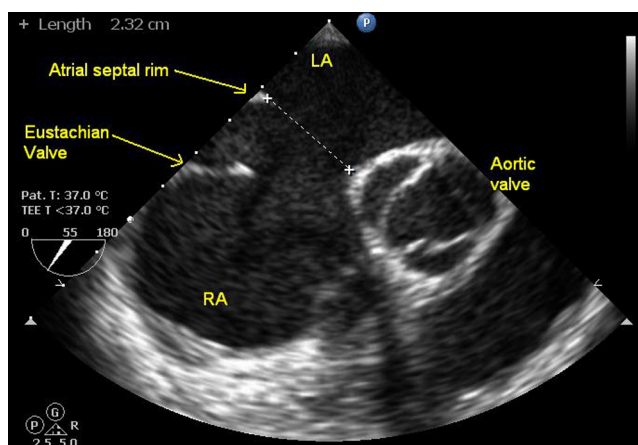


Fig. 3 – Midesophageal aortic valve short axis view showing eustachian valve and true superior ASD rim and deficient aortic rim.

Conflicts of interest

The authors have none to declare.

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Available online 3 April 2016

<http://dx.doi.org/10.1016/j.ihj.2016.03.026>

0019-4832/

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