Image



Eustachian Valvula: Real-Time Three-Dimensional Transthoracic Echocardiographic Imaging

Marcelo Luiz Campos Vieira and Antônio José Sproesser

Hospital Israelita Albert Einstein - São Paulo, SP - Brazil

The use of three-dimensional echocardiography for the analysis of cardiac structures allows the viewing of planes that make the anatomic identification more realistic¹⁻³. We present the case of a 41-year-old male patient, a high-performance athlete (marathoner) in whom an Eustachian valvula was identified. In the two-dimensional echocardiographic study (Figure 1), an elongated, filiform structure is observed. Three-dimensional echocardiography shows an elongated, but not filiform valvula which appears as a structure with a wide base, as identified in the short-axis view, which enables anatomic observation from a depth or elevation plane (Figure 2).

Potential Conflict of Interest

No potential conflict of interest relevant to this article was reported.

Sources of Funding

There were no external funding sources for this study.

Study Association

This study is not associated with any graduation program.

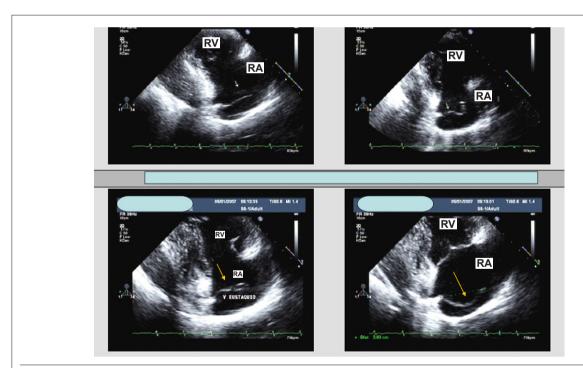


Fig. 1 - Two-dimensional transthoracic echocardiogram. Parasternal view of right chambers. A prominent Eustachian valvula is observed (arrows). RA - right atrium; RV - right ventricle; V - valvula.

Key words

Echocardiography; heart valves, Eustachian valvula, anatomy.

Mailing address: Marcelo Luiz Campos Vieira •

Rua Cardoso de Melo, 463/21 - 04548-002 - São Paulo, SP - Brazil

E-mail: mluiz766@terra.com.br

Manuscript received January 09, 2007; revised manuscript received January 01, 2007; accepted March 13, 2007.

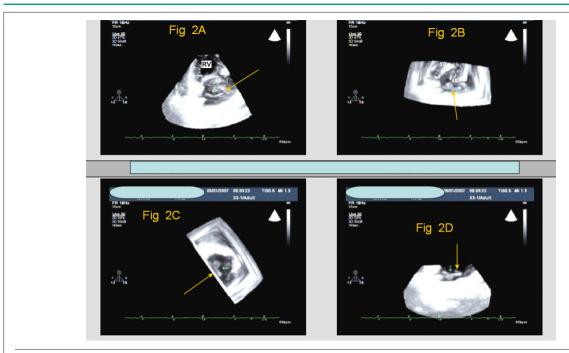


Fig. 2 - Real-time three-dimensional transthoracic echocardiography. Parasternal view of right chambers. The Eustachian valvula is observed (arrows) by rotating the parasternal view of right chambers. A) Conventional parasternal view of right chambers in atrial translation (viewing from the RV). C) Parasternal view of right chambers in clockwise rotation (viewing from the RV). D) Parasternal view of right chambers in ventricular translation (viewing from the RA). RA - right atrium; RV - right ventricle.

References

- 1. Li J, Sanders SP. Three-dimensional echocardiography in congenital heart disease. Curr Opin Cardiol. 1999; 14: 53-9.
- 2. Kisslo J, Firek B, Takahiro O, Kang DH, Fleishman CE, Stetten G, et al. Realtime volumetric echocardiography: the technology and the possibilities.
- Echocardiography. 2000; 17: 773-9.
- 3. Ahmad M. Real-time three-dimensional echocardiography in assessment of heart disease. Echocardiography. 2001;18 (1): 73-7.