

Quadricuspid aortic valve

Mohammed Almansori

Department of Medicine, Division of Cardiology, University of Dammam, Saudi Arabia

ABSTRACT

Quadricuspid aortic valve is an extremely rare congenital anomaly characterized by the development of aortic regurgitation, and associated with abnormally placed coronary ostia. We report a case of a quadricuspid aortic valve with mild aortic regurgitation.

Case Report

A 53-year old female was referred for echocardiography as a part of transient ischemic attack investigation. The echocardiogram did not demonstrate a cardiac source of thromboembolism. However, a quadricuspid aortic valve (Figure 1) with mild aortic regurgitation was observed.

Quadricuspid aortic valve is an extremely rare congenital anomaly with an incidence of between 0.008% to 0.033%.¹ Its clinical importance is the association with the development of aortic regurgitation and abnormally placed coronary ostia.² Few case reports have described an association with ruptured sinus of valsalva.^{3,4}

References

1. Feldman BJ, Khandheria BK, Warnes CA, et al. Incidence, description and functional assessment of isolated quadricuspid aortic valves. *Am J Cardiol* 1990;65:937-8.
2. Timperley J, Milner R, Marshall AJ, Gilbert TJ. Quadricuspid aortic valves. *Clin Cardiol* 2002;25:548-52.
3. Aggarwal SK, Lingan A, Reddy KK, et al. Quadricuspid aortic valve with ruptured sinus of valsalva aneurysm to the right atrium. *Echocardiography* 2009;26:977-9.
4. Akerem Khan SK, Tamin SS, Burkhart HM, et al. Quadricuspid aortic valve with ruptured sinus of valsalva. *Cardiol Young* 2012;1-3.

Correspondence: Mohammed Almansori, University of Dammam, PO Box 12875, Dammam 31483, Saudi Arabia.
Tel. +966.545.30.7447 - Fax: +966.3.896.6741.
E-mail: malmansori@gmail.com

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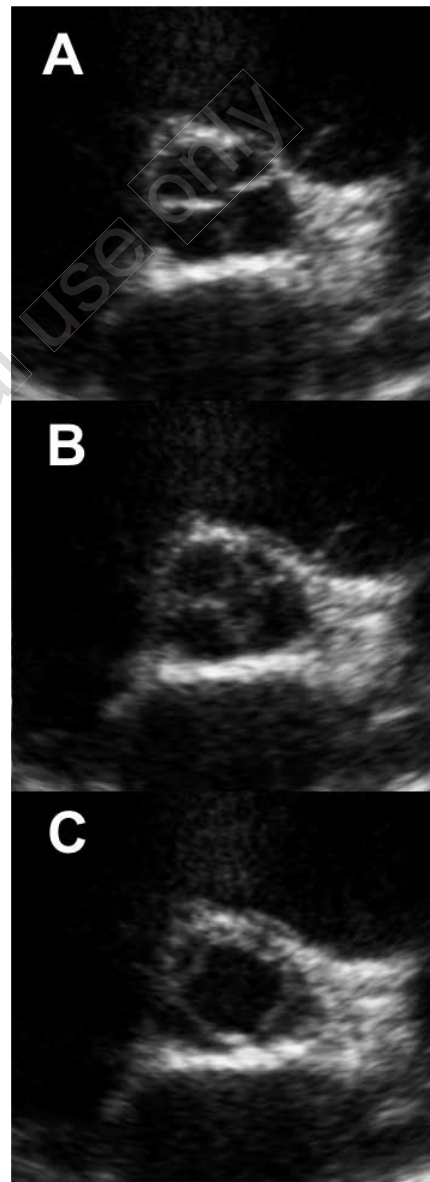


Figure 1. Echocardiographic short axis view at the level of the aortic valve. (A) Diastolic frame showing four aortic cusps. (B) Early systolic frame showing partial separation of the cusps. (C) Late systolic frame showing a diamond-shaped opening of the aortic valve.