Heart, Lung and Circulation (2019) **28,** e147–e148
1443-9506/04/$36.00
https://doi.org/10.1016/j.hlc.2019.05.099

LETTER TO THE EDITOR

Congenital Double Orifice Mitral Valve Is A Repairable Condition

Keywords Mitral valve repair • Heart valve prosthesis • Dual orifice valve

To the Editor

We have read with great interest Verma et al.'s manuscript entitled, ''An unusual finding of a double orifice mitral valve in a patient with Holt-Oram syndrome" [1]; we describe here a symptomatic patient with a similar condition and demonstrate that this condition can be surgically repaired with a good outcome. Congenital Dual Orifice Mitral Valve (DOMV) is an uncommon anomaly characterised by a mitral valve with two orifices and a single fibrous annulus [2]. DOMV was diagnosed in a 63-year-old Caucasian male with a cardiac murmur and dyspnoea who underwent work-up revealing severe mitral regurgitation (MR). While performing an echocardiogram evaluation a DOMV was demonstrated. A right thoracotomy approach was selected for valve repair [3], after initiating cardiopulmonary bypass the heart was arrested and the left atrium opened. Figure 1A depicts the DOMV as seen by the surgeon through a heart port camera, the mitral valve was confirmed to have a bi-leaflet prolapse with a congenital double orifice valve and primary leakage at an A1 cleft. Moreover, the two orifices of the MV can be seen separated by a leaflet tissue connecting the anterior and posterior annulus. The valve was repaired using a Simulus 34 mm ring (Medtronic, Minneapolis, MN, US) using 2-0 horizontal mattress sutures and cleft closure of A1 (Figure 1B). The echocardiographic result was satisfactory, and the patient was discharged home a week later.

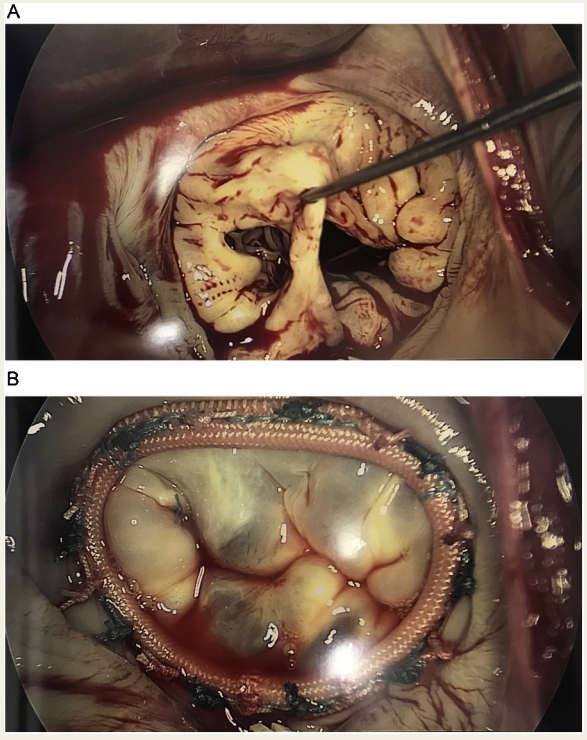

Figure 1 (A) Double orifice mitral valve – Surgeon's view. (B) Double orifice mitral valve post valve repair and ring implantation – Surgeon's view.

Conflict of Interest

No conflict of interests/No funding

Yaron D. Barac, MD, PhD
Donald D. Glower, MD *
The Division of Cardiovascular and Thoracic Surgery at Duke University Medical Center, Durham, NC, USA
*Corresponding author at: Box 3851 Duke Univ Med Ctr, Durham, NC, 27710, USA.
Email: Glowe001@mc.duke.edu (D.D. Glower).

DOI of original article: https://doi.org/10.1016/j.hlc.2018.11.017

References

[1] Verma KP, Healy S, Teng J, Nerlekar N. An unusual finding of a double orifice mitral valve in a patient with holt-oram syndrome. Heart Lung Circ 2019;28(December 10):e99–100.

[2] Pires N, Li W, Senior R, Khattar RS. Incidental finding of a double orifice mitral valve in an elderly patient: value of 3D imaging. Echo Res Pract 2017;4(September 3):K21–4.

[3] Duan QJ, Gao Z. Mitral valve repair for double-orifice mitral valve. Heart Lung Circ 2014;23(December 12):e267–9.