

Double-Orifice Mitral Valve

DONG-IL LEE, M.D., JONG-WON HA, M.D., PH.D., BOYOUNG CHUNG, M.D., YOUNGWOON KIM, M.D., PH.D., KOOK-JIN CHUN, M.D., SE-JOONG RIM, M.D., PH.D., NAMSIK CHUNG, M.D., PH.D.

Cardiology Division, Cardiovascular Center, Yonsei University, College of Medicine, Seoul, Korea

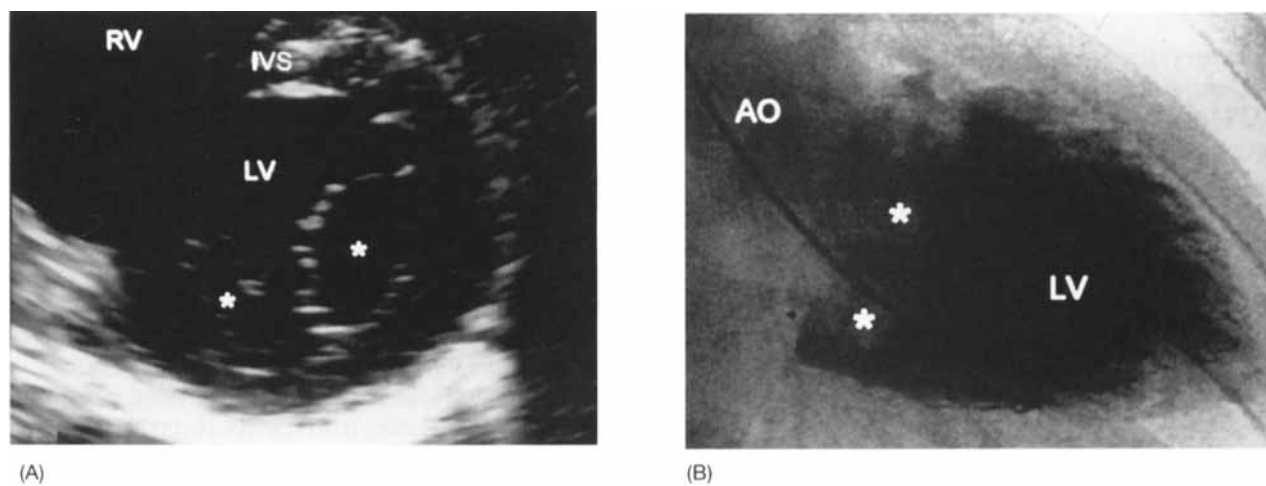


FIG. 1 (A) Transthoracic echocardiography. Parasternal short-axis view at the level of the mitral valve demonstrating two separate mitral valve orifices. The lateral orifice was located anterior to the medial orifice. (B) Left ventricular angiography in the right anterior oblique projection revealed the two separate mitral leaflets indicated by asterisks.

Double-orifice mitral valve is a relatively rare congenital abnormality. It may occur as an isolated anomaly, but more frequently is associated with other cardiac abnormalities. It is usually discovered as an incidental finding at autopsy or during surgical correction of an associated cardiovascular abnormality.

A 42-year-old woman was admitted for the evaluation of chest pain. Her prior medicosurgical history was unremarkable. Physical examination revealed no significant finding. Electrocardiography revealed normal sinus rhythm without ST-T change. Chest x-ray appeared normal. Transthoracic echocardiography of parasternal short-axis view at the level of the mitral valve demonstrated two separate mitral valve orifices. The lateral orifice was located anteriorly with the medial orifice placed posteriorly (Fig. 1A). No other associated congenital abnormality was observed. Transesophageal echocardiography in the longitudinal two-chamber view showed the two mitral orifices as well as the separation extending from the annulus to the free edges of the valve. Color-flow imaging revealed two separated jets of mitral inflow during diastole. Coronary arteriography revealed no significant luminal narrowing. Left ventriculography in the right anterior oblique projection also revealed two separate mitral orifices (Fig. 1B).

Address for reprints:

Jong-Won Ha, M.D., Ph.D.
Cardiology Division, Cardiovascular Center
Yonsei University College of Medicine
C.P.O Box 8044
Seoul, Korea

Received: August 7, 1998

Accepted with revision: September 19, 1998

Reference

Rowe DW, Desai B, Bezmalinovic Z, Desai JM, Wessel RJ, Grayson LH: Two-dimensional echocardiography in double orifice mitral valve. *J Am Coll Cardiol* 1984;4:429-433