

QUADRICUSPID AORTIC VALVE

Robert C. Schutt, M.D., M.S.; Dimitrios Maragiannis, M.D.; Gopi Shah, M.D.

Houston Methodist DeBakey Heart & Vascular Center, Houston Methodist Hospital, Houston, Texas

In 1973, Hurwitz and Roberts¹ classified quadricuspid aortic valves as type A-G based on the morphology. Type A (equal cusps) and type B (3 equal cusps and 1 smaller cusp) were found to be the most commonly identified variants. Further typical findings include valve fibrosis (evident in panels B and D), poor coaptation, and a corpus arantii (the nodule at the free edge of each cusp, best seen on panel C). This valve anomaly is progressive, and most

patients with quadricuspid aortic valve typically require surgical repair after age 50. Patients with this condition require close surveillance for progression of aortic regurgitation.

References

1. Hurwitz LE, Roberts WC. Quadricuspid semilunar valve. *Am J Cardiol.* 1973 May;31(5):623-26.

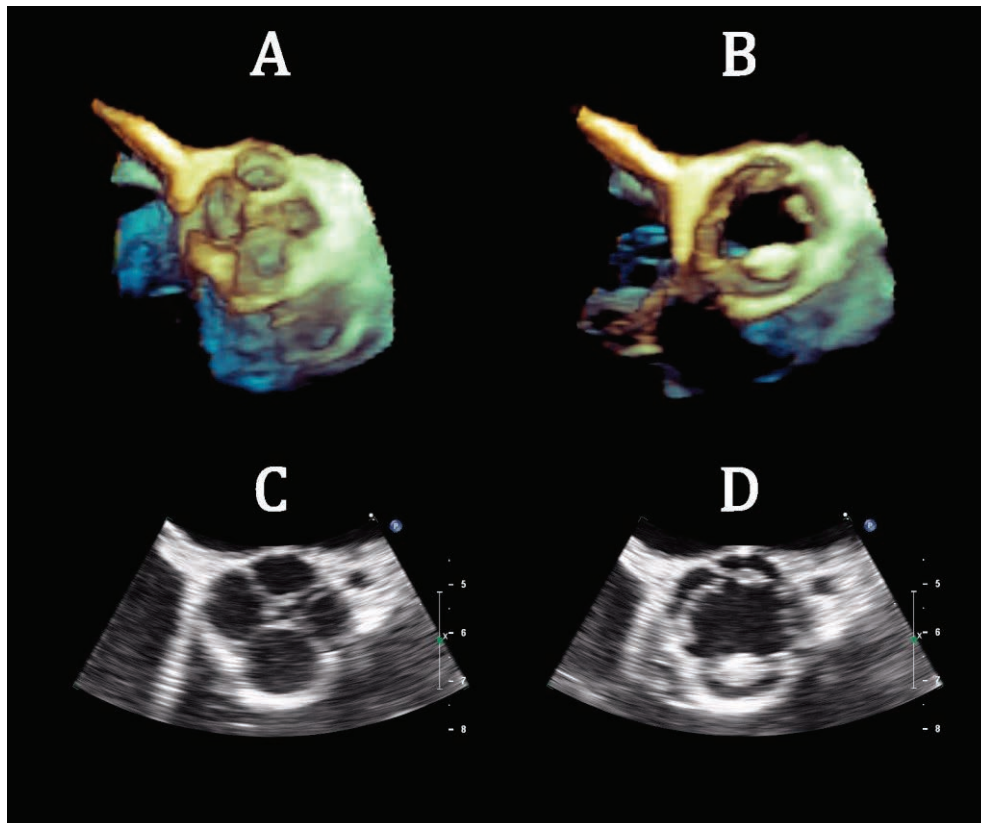


Figure 1. Transesophageal echocardiogram of a quadricuspid aortic valve during diastole (A and C) and systole (B and D).