Two Cases of Accessory Valves

By happenstance, this issue of the THI Journal reports 2 separate cases of distinctly uncommon isolated congenital abnormalities of the atrioventricular valves. In each case, the defect was detected incidentally on echocardiography in an asymptomatic woman, one in her 5th decade of life and one in her 6th. Both cases include high-quality still and motion images for review.

Case 1. Rozo and colleagues report an accessory mitral valve. This entity is uncommonly seen in children, and the lesion is usually accompanied by left ventricular outflow tract obstruction necessitating early surgical intervention. Detection of an accessory mitral valve structure in adults is rare and is also typically associated with left ventricular outflow obstruction. In this adult patient, there were no symptoms or outflow obstruction and, because her clinicians recognized the entity, the patient was managed conservatively.

Case 2. Yoon and colleagues report an accessory tricuspid valve. The defect was similarly detected in an asymptomatic woman who underwent a screening echocardiogram for a research study. Her tricuspid valve was so misshapen that she eventually had open-heart surgery for a definitive diagnosis. The echo and MRI images appeared to demonstrate a small parachute-like “daughter” tricuspid valve leaflet with separate chordal attachments. This was confirmed during surgery, along with the presence of myxomatous degeneration of the entire tricuspid valve. A review of the literature and a personal straw poll among my colleagues found the accessory tricuspid valve entity to be a decidedly obscure diagnosis in adults.

Both of these cases serve to remind noninvasive imaging practitioners that recognition of anatomic abnormalities—even if they are rare and clinically silent—can be important for the patients who have them. In each case, an echocardiogram incidentally detected a clinically silent valve abnormality. Although echocardiography is generally thought to be safe, there are potential consequences when rare, obscure, or unexplained findings (incidentalomas) are found. If a diagnosis is in question, individuals may be subjected to additional imaging methods with contrast, radiation, invasive procedures, or even surgery as in the 2nd patient. We are grateful for the authors’ submission of both moving echo and MRI images to illustrate these unusual cases.

During the late 1990s and early 2000s, cardiologists saw a surge of recognition and clinical interest in other entities that were uncommon but difficult to image, such as papillary fibroelastomas and left ventricular noncompaction. This may have been due, in part, to the simultaneous emergence of both high-resolution cardiac MRI and improved left ventricular endocardial definition by echocardiography. It will be interesting to see whether there is a similar surge in reports of accessory tricuspid valve leaflets. However, I doubt if this will be the case, because the imaging methods for identification are now relatively well known.

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References