Adult Accessory Mitral Valve with Septal Hypertrophy

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A 28-year-old man visited our hospital due to atrial fibrillation, which spontaneously returned to normal sinus rhythm. Routine two-dimensional transthoracic echocardiography revealed marked septal hypertrophy and mitral valve anomaly, which caused left ventricular outflow tract (LVOT) stenosis, but could not clarify these anomalies in detail. Conversely, three-dimensional transesophageal echocardiography (3D-TEE) clearly showed the anomaly structure, which folded into the diastole and existed on the lateral portion of the acute myeloid leukemia (AML) (Picture A). These anomaly structures expanded during systole and the diameter at the bottom of the structures measured 22×21 mm. Bulging of part of the AML created a cavity without connection to the left atrium and overhung into the hypertrophic septum (Picture B). According to these pathognomonic findings of 3D-TEE, we finally diagnosed this anomaly as an isolated accessory mitral valve (AMV) with septal hypertrophy.

An adult case of AMV with septal hypertrophy is very rare and surgical management of AMV patients remains controversial (1). In our case, the observed septal hypertrophy might be associated with a genetic cardiac inconsistency, such as hypertrophic cardiomyopathy (2). 3D-TEE clearly identifies AMV and can precisely assess AMV patients with complex anomalies.

The authors state that they have no Conflict of Interest (COI).

**References**


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