

Assessment of a Left Ventricular Mass Using Three-Dimensional Transesophageal Echocardiography

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March 07, 2024

Abstract

A 47-year-old man with an asymptomatic left intraventricular mass was referred to our hospital. Transthoracic echocardiography (TTE) revealed a mass attached to the lateral wall of the left ventricle, with no other structural changes. The true view mode of three-dimensional TEE was more visual, and revealed a regular, very mobile, ball-like mass that was attached to the anterolateral papillary muscle. The mass was then surgically excised. Histopathological analysis indicated that the mass was a myxoma. Cardiac myxomas are commonly seen in the left atrium. Left ventricular myxomas are extremely rare, especially one attached to the papillary muscles.

Assessment of a Left Intraventricular Mass Using Three-Dimensional Transesophageal Echocardiography

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A 47-year-old man with an asymptomatic left intraventricular mass was referred to our hospital from another facility. Transthoracic echocardiography (TTE) revealed a 1.5cm × 1.2 cm mass attached to the lateral wall of the left ventricle (Figure A), with no other structural changes. A Two-dimensional Transesophageal echocardiography(TEE) produced the same findings (Figure B). Compared to the conventional three-dimensional (3D) TEE (Figure C), the true view mode of 3D TEE was more visual, and revealed a regular, very mobile, ball-like mass that was attached to the anterolateral papillary muscle (Figure D-F). The mass was then surgically excised. During surgery, a regular, jellylike, grape-shaped, dull red mass was found in the left ventricle, attached to the root of the anterolateral papillary muscle (in thoracoscope, Figure G). Histopathological analysis indicated that the mass was a myxoma (Figure H). Four days later, follow-up echocardiography using TEE showed that the mass was completely excised and left ventricular function was normal (Figure I). The patient had an uneventful postoperative recovery.

Cardiac myxomas are commonly seen in the left atrium. Left ventricular myxomas are extremely rare, especially one attached to the papillary muscles. The true view 3D TEE was recently introduced into clinical practice. It shows structures in an anatomic angle of view. As shown in this report, it helped in diagnosing the mass and its relationship with surrounding structures.

