A bunch of grapes in the left ventricle

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A 65-year-old man, heavy smoker, was admitted because of severe exertional dyspnea and vague chest pain for 2 weeks. A chest X-ray was taken and revealed a large mass in the left lung field (Figure 1). Cytological examination of the percutaneous needle aspiration of a lymph node in the anterior mediastinum revealed malignant epithelial cell nests which was strongly suggestive of squamous cell carcinoma. Transthoracic echocardiography was performed and revealed multiple mass-like lesions with central liquefactions in the left ventricle resembling a bunch of grapes.

Illustration

A 65-year-old man, heavy smoker, was admitted because of severe exertional dyspnea and vague chest pain for 2 weeks. A chest X-ray was taken and revealed a large mass in the left lung field (Figure 1). Cytological examination of the percutaneous needle aspiration of a lymph node in the anterior mediastinum revealed malignant epithelial cell nests which was strongly suggestive of squamous cell carcinoma. Transthoracic echocardiography was performed and revealed multiple mass-like lesions with central liquefactions in the left ventricle resembling a bunch of grapes (Figure 2) (see Video Clip 1 and 2). Moderate pericardial effusion was also detected. These findings were highly suggestive of left ventricular metastasis. Echocardiography is the primary screening tool for patients with known or suspected intracardiac tumors. Cardiac tumors can be divided into those that are primary to the heart and those that are secondary or metastatic. They can be further divided into benign and malignant types. The most common benign primary tumor of the heart is the atrial myxoma. The majority of cardiac malignancies represent metastatic disease, most commonly from the esophagus, lung, or breast. Primary cardiac malignancies are relatively rare and can appear in virtually any chamber. Diffuse malignancies, such as lymphoma, can also involve the heart either primarily or secondarily. Metastatic disease of the heart is virtually always associated with pericardial involvement. The appearance of metastatic disease in the heart is typically mobile echo-dense masses attached to the endocardium, although isolated intramural masses and diffuse myocardial invasion have also been noted. In the present study, we described a case of left ventricular metastasis in which multiple mass-like lesions filled the left ventricular cavity resembling a bunch of grapes.

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Supplementary material

Supplementary material associated with this article can be found in the online version.

References


Figure 2. Transthoracic echocardiography of a 65-year-old man who suffered from squamous cell carcinoma of the lung. Multiple mass like lesions with central liquefactions are seen in the left ventricle resembling a bunch of grapes. Metastasis to the left ventricle was the final diagnosis.