



## Papillary Fibroelastoma of the Mitral Valve: an Unusual Cause of Mitral Valve Obstruction

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A 50-year-old adult female was admitted to our outpatient clinic with a complaint of dyspnea on effort. Cardiac examination revealed a diastolic murmur best heard at the apex, but was otherwise unremarkable. Transthoracic echocardiography demonstrated a mobile, spherical, hyperechoic, homogeneous mass attached to the posterior mitral leaflet which was causing significant mitral stenosis. 2-dimensional (D) and 3D transesophageal echocardiography confirmed that the mass located at the posterior mitral leaflet was 1.1×1 cm in size and had mitral annular calcification with moderate mitral stenosis (mitral valve area, 1.36 cm<sup>2</sup> and transmitral gradient: maximum, 11 mmHg; mean, 5 mmHg) (Fig. 1A-D and Video 1, 2 in the online-only Data Supplement). Ultimately, the patient was referred for cardiac surgery. Surgical excision of the mass was successfully performed. The mass was diagnosed as a papillary fibroelastoma based on the histopathologic examination (Fig. 1E, F). The postoperative course was uneventful.

The most common primary cardiac tumors are myxoma and lipoma. Myxomas, which usually originate from the interatrial septum in the left atrium, account for about half of all primary cardiac tumors. Papillary fibroelastomas, on the other hand, are relatively rare. Although papillary fibroelastomas are usually asymptomatic and are detected incidentally, they can cause life-threatening embolic complications such as myocardial infarction,

stroke, and pulmonary embolism.<sup>1)</sup> Valve obstruction caused by a fibroelastoma is an unusual complication.<sup>2)</sup> In this case, the fibroelastoma caused functional mitral valve stenosis owing to hindered filling of the left ventricle. To the best of our knowledge, this is the second case report showing a papillary fibroelastoma on the mitral valve causing significant mitral valve obstruction.

### Supplementary Materials

The online-only Data Supplements are available with this article at <https://doi.org/10.4070/kcj.2016.0223>.

### References

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• The authors have no financial conflicts of interest.

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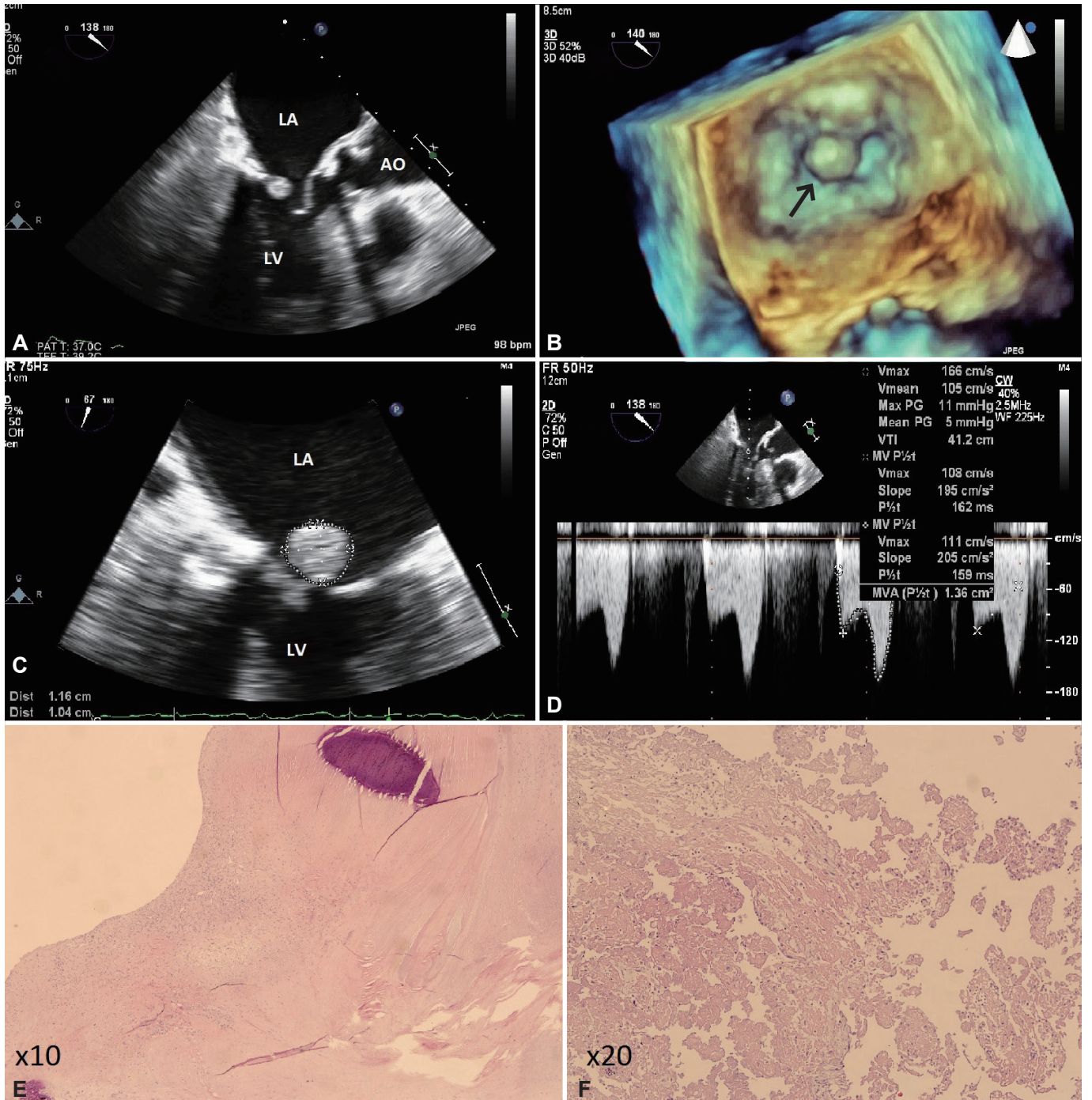


Fig. 1.