A 52-year-old woman was admitted to our hospital with syncope. She had a three-year history of palpitations on effort and progressive dyspnea. On physical examination, a mid diastolic murmur was heard at the apex, with a mild pansystolic murmur. Transthoracic echocardiography revealed an echogenic mass attached to the posterior leaflet of the mitral valve, prolapsing into the left ventricle in diastole (Figure A, Video 1*) and creating an 18 mmHg mean gradient at the mitral valve during diastole. Transesophageal echocardiography showed a sessile circular mass of homogeneous appearance with regular contours measuring 3.2x2.75 cm. It was attached to the atrial side of the posterior mitral valve leaflet (Figure B, Video 2*) causing significant mitral valve obstruction and mild regurgitation (Figure C, Video 3*). Emergent surgical resection was performed. Pathological analysis showed destruction of the posterior leaflet of the mitral valve by a vegetating mass. Final histological diagnosis was myxoma. The patient was discharged without any complications and remained well at her 3-month follow-up. The incidence of myxomas originating in the mitral valve is very low. This case was worth reporting because of its rarity and presentation with syncope, since the most common manifestation of valvular tumors is cerebral or peripheral emboli.

Figures– (A) Transthoracic apical four-chamber (systole and diastole) view showing a round homogeneous mass located at mitral valve level. (B) 145° (systole) and 125° (diastole) transesophageal views showing a round, lobulated, homogeneous mass arising from the atrial side of the posterior leaflet of the mitral valve. (C) 125° (systole) and 125° (diastole) transesophageal views showing mild regurgitation and significant obstruction of the mitral valve. *Supplementary video files associated with this presentation can be found in the online version of the journal.