

Papillary Fibroelastoma of the Aortic Valve in a Patient with Syncope

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Papillary fibroelastomas (PFEs) are rare tumors accounting for less than 10% of all benign primary cardiac tumors (1). Although these tumors were previously incidental findings at autopsy or surgery, an increasing number of PFEs are being identified with widespread practice of echocardiography. Transesophageal echocardiography (TEE) provides the morphologic and anatomic details that are necessary for an optimal therapeutic approach. Despite their benign aspect, surgical management is recommended because of the propensity of these tumors to embolise (2).

We report a case of PFE of the aortic valve diagnosed by transthoracic echocardiography (TTE) and TEE and treated successfully by surgery.

A fifty one year old female was admitted to the hospital complaining of a syncopal attack that happened a few days ago. Her physical examination revealed normal findings. Her blood pressure was 170/100 mmHg and pulse was 75/min, regular. The electrocardiogram, chest radiography and cerebral computerized tomography scan were evaluated as normal. Routine transthoracic echocardiography revealed a mobile echodense mass at the aortic side of the valve. Neither the evidence of obstruction nor regurgitation of the valve were detected. Transesophageal echocardiography was performed in order to identify the exact location of the tumor. A mobile rounded highly echogenic 10 x 10 mm mass attached to the right coronary cusp of the aortic valve was seen (Figure 1). Cardiac catheterization revealed normal coronary arteries. Because of the risk of embolisation, the patient was referred for surgical resection. Aortotomy revealed a 10 x 10 x 10 mm soft, mucoid, yellow mass attached to the right coronary cusp of the aortic valve with a short pedicle (Figure 2). The mass was prolapsing into the right coronary ostium suggesting the possibility of an intermittent obstruction. The mass was excised and right coronary cusp primarily repaired by prolene continuous sutures. Histological diagnosis was consistent with PFE (Figure 3). The patient had an uneventful postoperative recovery. Transesophageal echocardiography performed on the second postoperative day, showed minimal regurgitation of the aortic valve. After six months of follow-up, the aortic valve was competent with no sign of recurrence.

As a conclusion; the natural history of PFEs remains unknown, surgical management is recommended beca-



Figure 1. Transesophageal long axis view of aortic valve depicting papillary fibroelastoma with a short pedicle attached to the right coronary cusp

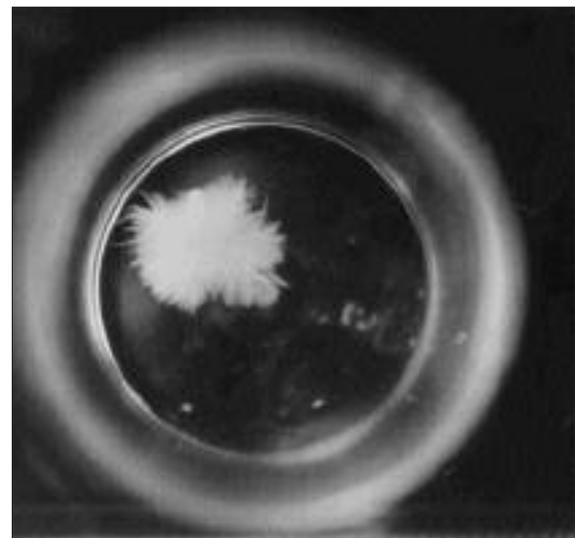


Figure 2. Macroscopic view of the tumor shows multiple frond-like structures (photographed under water) giving it the appearance of the sea anemone

use of the potential risk of life-threatening complications even if patients are asymptomatic (2,3). A conservative approach using standard valvular repair techniques after total excision of the tumor is usually preferred.

References

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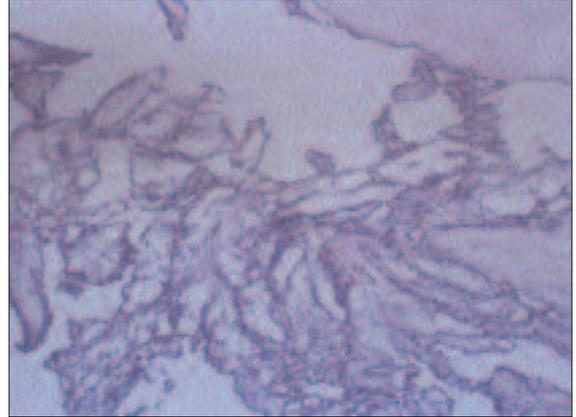


Figure 3. Hematoxylin-eosin of biopsy specimen, magnification x 40. Papillary lesions lined with single layer of endothelium



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Safranbolu Evleri