

## Pulmonary valve endocarditis

### *Pulmoner kapak endokarditi*

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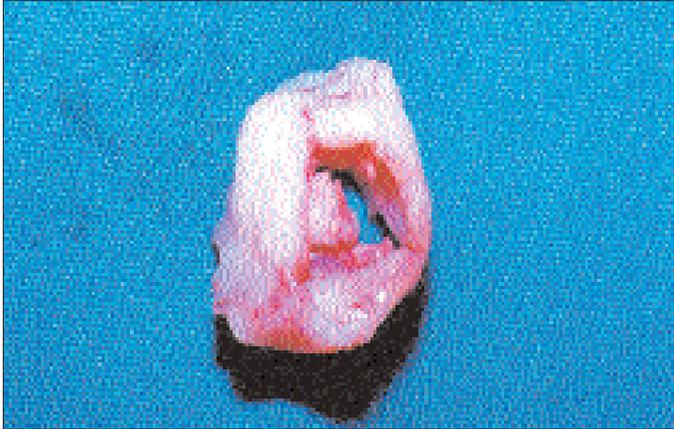
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An eleven years old boy was admitted to another hospital with fever, malaise and fatigue. On physical examination 3/6 systolic murmur in mesocardium was noticed and echocardiography was performed which showed a ventricular septal defect (VSD) with a vegetation over pulmonary, valve and pulmonary artery pressure of 90 mmHg. The patient's family was unaware of the VSD previously. The patient was hospitalized with the diagnosis of subacute endocarditis and triple antibiotic regimen was started. The blood cultures were negative during this time despite the fever. The echocardiography was repeated and a large outlet VSD with pulmonary valve gradient of 50 mmHg and

vegetation over the pulmonary valve were reported. Meanwhile patient had several small infarcts in his lungs, which were evident in his chest X-ray. Despite the 6 weeks of medical therapy persistent fever and recurrent emboli into lungs made the surgical therapy as mandatory.

Patient was referred to our hospital for surgical therapy. Pulmonary arteriotomy was performed and the pulmonary valve was excised. There was a large pediculated vegetation over the cusps of the pulmonic valve (Fig. 1). Considering monocusp pericardial valve may improve the sudden hemodynamic change we have implanted a glutaraldehyde preserved pericardial patch to prevent further pulmonary valve insufficiency. Outlet VSD was closed with a pericardial patch. The patient was easily weaned from cardiopulmonary bypass. Pulmonary artery pressure (PAP) at the end of the operation was 50 mmHg. At postoperative 24th hour patient fell into the episode of pulmonary hypertensive crisis while he was still intubated. His PAP was 80 mmHg. Blood gas analysis showed marked hypoxemia and hypercapnia. He progressed into the low cardiac output state. Despite the full medical therapy he eventually arrested. The autopsy showed a dilated right ventricle and several infarcts in the lungs.

In conclusion, excision of the pulmonary valve in the setting of pulmonary valve endocarditis is an acceptable option to prevent the septic emboli and to control the infection. However pulmonary valve insufficiency should be monitorized carefully and every effort should be made to prevent pulmonary hypertensive crisis in those patients.



**Figure 1.** Large vegetation on the excised pulmonary valve