A 59-year-old female, with past history of recurrent ischemic cerebrovascular accidents. Transesophageal echocardiography showed a 7-8 mm mass arising from the anterior leaflet of the mitral valve with trivial mitral insufficiency (Fig. 1). The patient was operated through a trans-right atrial septal incision. The mass was excised and the anterior leaflet of the mitral valve repaired (Fig. 2). The histological examination confirmed papillary fibroelastoma. The patient was discharged on the seventh postoperative day.

**Key words:** Cardiac tumor. Papillary fibroelastoma. Surgery.