A 75-year-old man presented with a complaint of acute dyspnea. He had a two-year history of aortic valve replacement for aortic stenosis. His blood pressure was 90/60 mmHg and pulse rate was 100/min. There was a 2/6 diastolic murmur at the left sternal border. Transthoracic echocardiography showed partial dehiscence of mechanical aortic valve and severe aortic regurgitation. Transesophageal echocardiography confirmed severe aortic regurgitation and partial dehiscence of the mechanical aortic valve (Fig. A-C). There were no signs of infective endocarditis. Aortic valve replacement was successfully performed, during which partial dehiscence of the aortic valve from suture lines of the aortic annulus was noted resulting from thinning of the aortic annulus (Fig. D).

Figures. (A-C) Transesophageal echocardiography showed partial dehiscence of mechanical aortic valve and severe aortic regurgitation. (D) At surgery, partial dehiscence of the aortic valve from suture lines was noted resulting from thinning of the aortic annulus.