Quadricuspid aortic valve diagnosed by transthoracic echocardiography

A 26-year-old man was examined for symptoms of atypical angina and occasional palpitations without exertional dyspnea, and a diastolic heart murmur. He had no previous history of cardiovascular disease or drug use. Physical examination showed normal development; his blood pressure was 130/60 mmHg and pulse rate was 74 beats/min. On auscultation of the heart, there was a grade 2/6 diastolic murmur along the left sternal border. The electrocardiogram showed normal sinus rhythm and the chest radiogram was normal. Transthoracic echocardiography showed a quadricuspid aortic valve in the short-axis view (Fig. A). The left ventricular size and ejection fraction were normal. Transesophageal echocardiography showed a quadricuspid aortic valve with two equal large cusps and two equal smaller cusps in the short-axis view (Fig. B) and a central moderate aortic regurgitation in the long axis view (Fig. C).

Figures. (A) Transthoracic and (B) transesophageal echocardiograms showing a quadricuspid aortic valve in the short-axis view. (C) Transesophageal echocardiogram showing a central moderate aortic regurgitation in the long-axis view.