A 26-year-old male was admitted to our cardiology department with complaints of dyspnea and palpitations. His blood pressure was 100/80 mmHg, heart rate was 79 beats/min, and respiratory rate was 25/min. On physical examination, there was a grade 1-2/6 systolic ejection murmur on the upper thorax and a widely split S₂. The electrocardiogram showed sinus rhythm with incomplete right bundle branch block. On transthoracic echocardiography, left ventricular diameters and heart valves appeared normal. There was mild mitral insufficiency. Enlargement of the right ventricle and a left-to-right shunt within the atrial septum were also noted. Estimated peak systolic pulmonary artery pressure was 45 mmHg and the Qp/Qs ratio was 1.5. Transesophageal echocardiography showed an ostium primum defect, 7 mm in diameter, in the annular region of the interatrial septum (Fig. A), and a sinus venous defect, 11.6 mm in diameter, near the superior vena cava (Fig. B). Sinus venosus and primum type atrial septal defects were also confirmed by cardiac catheterization, where the calculated Qp/Qs ratio was 1.7, peak systolic pulmonary artery pressure was 40 mmHg, and mean pulmonary artery pressure was 27 mmHg. The patient was referred for surgical repair.

Figures. Transesophageal echocardiograms of (A) ostium primum defect and (B) sinus venous defect. LA: Left atrium; RA: Right atrium; SVC: Superior vena cava.