Interatrial septal aneurysm (IASA) is diagnosed when the septum travels 10 mm or more into either one or both atria and has a base width of 15 mm or greater. A large echocardiography and autopsy series previously determined that the prevalence of IASAs in the general population is approximately 1-2%. A 27-year-old man was referred to our outpatient clinic after experiencing palpitations and dyspnea on exertion. Physical examination was unremarkable. Electrocardiography showed normal sinus rhythm with an incomplete right bundle branch block. Two and three-dimensional transthoracic echocardiography (2D and 3D TTE) showed a giant aneurysm of the interatrial septum and right ventricular dilatation (Fig. and Video* 1A, 1B). The calculated shunt fraction (Qp/Qs) was 2.2. For further evaluation, we performed two-dimensional transesophageal echocardiography (2D TEE), which displayed a huge IASA (Fig. and Video* 1C). Color Doppler TEE showed left-to-right shunting through a multiple atrial septal defect (ASD) (Fig. and Video* 1D). The IASA was completely resected, and then, the atrial septal defect was closed with a pericardial patch. IASA is frequently considered a primary malformation involving the fossa ovalis region and most commonly associated with patent foramen ovale (PFO) and secundum atrial septal defects (ASDs). Although TTE is the diagnostic method of choice for IASA, TEE should be performed to investigate whether ASD or PFO are associated with the IASA.

**Figures**—(A) Two-dimensional (2D) transthoracic echocardiography (TTE) showing a giant aneurysm of the interatrial septum and right ventricular dilatation. (B) Three-dimensional TTE displaying a huge interatrial septal aneurysm. (C) 2D transesophageal echocardiography (TEE) revealing a huge interatrial septal aneurysm. (D) 2D color Doppler TEE showing left-to-right shunting through a multiple atrial septal defect. *Supplementary video files associated with this presentation can be found in the online version of the journal.*