A 27-year-old female patient who had mucopolysaccharidosis type II and had been followed-up by medical treatment (enzyme replacement therapy) for three years was admitted to our cardiology clinic for further assessment of cardiac involvement. On physical examination, she had an apical 3/6 systolic ejection murmur of low intensity. Electrocardiography showed sinus rhythm with normal axis. The chest X-ray was unremarkable. Transthoracic echocardiography revealed mitral valve thickening with mild mitral regurgitation and an atrial septal aneurysm (Fig. A-D, supplementary video files 1-3). Other echocardiographic findings were normal. Transesophageal echocardiography could not be performed due to the lack of patient’s cooperation. We recommended regular routine echocardiographic follow-up to the patient.

Figures. (A) Parasternal long-axis, (B) apical 4-chamber, and (C) parasternal short-axis views showing mitral valve thickening. (D) Color Doppler echocardiography showing mild mitral regurgitation. *Supplementary video files associated with this case can be found in the online version.