on nuclear stress imaging, chest pain and dynamic ST segment changes might be attributed to coronary steal phenomenon. Because of the diffuse nature of fistulas and the hardness of the process, surgical ligation or percutaneous endoluminal procedures were not considered. The patient was discharged from the hospital with medical treatment.

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Video 1, 2. Multiple corono-cameral fistulas are clearly seen with cardiac cycle

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Three-dimensional echocardiography in the evaluation of cor triatriatum sinistrum in an adult patient with atrial septal defect

Atriyal septal defektli yetişkin bir hastada kor triatriatum sinistrumun değerlendirilmesinde üç boyutlu ekokardiyografi

Cor triatriatum sinistrum is a rare congenital malformation, accounting for 0.1-0.4% of congenital heart disease, characterized by an abnormal fibromuscular membrane which subdivides the left atrium into two chambers. It is generally diagnosed during the neonatal period or early childhood but a minority of patients present in adulthood incidentally. The most common associated cardiac anomalies are atrial septal defect, persistent left superior vena cava and mitral regurgitation. A 28-year-old-male patient was admitted to our outpatient clinic because of palpitation and shortness of breath. His medical and family history was unremarkable. The 12-lead electrocardiogram showed a sinus rhythm. Two-dimensional transthoracic echocardiography revealed dilated right atrium and ventricle, atrial septal defect (ASD) and a membrane at the left atrium (Fig. 1A and Video 1A). The calculated Qp/Qs was 2.3. Two-dimensional transesophageal echocardiography confirmed cor triatriatum sinister and ASD (Fig. 1B, C and Video 1B, C). For further evaluation of this pathology, we applied three-dimensional transesophageal echocardiography, which revealed a single opening on the fibromuscular membrane (Fig. 1D, E and Video 1D). We measured the area of orifice using iSlice multi-planar review mode as 1.64 cm2 (Fig. F). He underwent the surgical resection of the intraatrial membrane through the left atrium and closure of the atrial septal defect with a pericardial patch. We herein demonstrated two-dimensional and three-dimensional echocardiographic features of cor triatriatum sinistrum in a patient with atrial septal defect. For cor triatriatum, three-dimensional transesophageal echocardiography may be useful in revealing the number, shape, area and location of the orifice in detail.

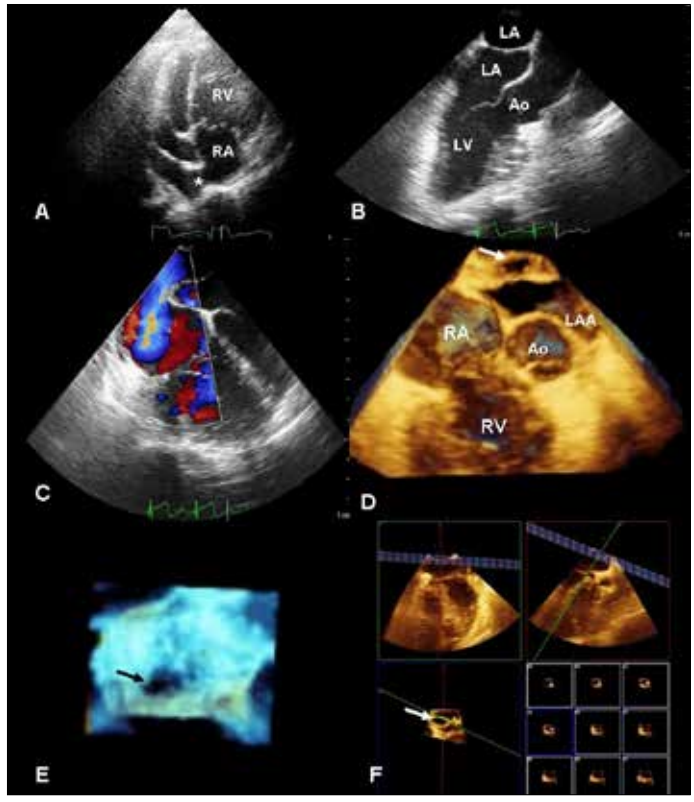

Figure 1. Two-dimensional transthoracic echocardiography revealed dilated right atrium and ventricle, atrial septal defect (ASD) and a membrane at the left atrium (A). Two-dimensional transesophageal echocardiography confirmed cor triatriatum sinister and ASD (B, C). Three-dimensional transesophageal echocardiography revealed a single opening on the fibromuscular membrane (D, E). The area of orifice using iSlice multi-planar review mode was 1.64 cm^2 (F)
Ao - aorta, Arrow - a single opening, asterisk - atrial septal defect, LA - left atrium, LAA - left atrial appendage, LV - left ventricle, RA - right atrium, RV - right ventricle

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Video 1. A) Two-dimensional transthoracic echocardiography revealing dilated right atrium and ventricle, atrial septal defect and a membrane at the left atrium, B, C) Two-dimensional transesophageal echocardiography confirming cor triatriatum sinister and atrial septal defect, D) Three-dimensional transesophageal echocardiography revealing a single opening on the fibromuscular membrane.

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