Quadricuspid aortic valve with partial pulmonary venous return anomaly and atrial septal defect

Dört yaprakçıklı aortik kapak ile birlikte parsiyel pulmoner venöz dönüş anomalisi ve atriyal septal defect

A 55-year-old man was admitted to the hospital because of palpitations and progressive dyspnea over the last 10 days. Electrocardiogram showed atrial flutter (120-130 beats/min). Transthoracic echocardiography demonstrated normal left ventricular function, mild aortic regurgitation, a volume-loaded right ventricle, mild tricuspid regurgitation, moderate pulmonary artery hypertension, and suspected shunt across the atrial septum in color flow Doppler in apical four-chamber view. Transesophageal echocardiography (TEE) delineated sinus venosus atrial septal defect (SVD) (Figure A), patent foramen ovale (PFO) and quadricuspid aortic valve with mild aortic regurgitation (Figure B). Computed tomography (CT) detected SVD (Figure C). Three-dimensional CT pulmonary angiogram also demonstrated that the right superior pulmonary veins (RSPV) and right middle pulmonary vein (RMPV) drained directly into the superior vena cava (SVC), while other venous drainage was normal (Figure D). The patient underwent surgical correction. The postoperative course was uneventful, and his symptoms had improved postoperatively.

Figures– (A) TEE showed the SVD. (B) TEE showed quadricuspid aortic valve and PFO (asterisk). (C) CT showed ASD. (D) 3-D CT showed the right superior pulmonary veins and RMPV draining directly into the SVC. RA: Right atrium; LA: Left atrium; SVD: Sinus venosus atrial septal defect; PFO: Patent foramen ovale; ASD: Atrial septal defect; RSAPV: Right superior apical pulmonary vein; RSAPPV: Right superior anteroposterior pulmonary vein; RMPV: Right middle pulmonary vein; SVC: Superior vena cava. *Supplementary video file associated with this presentation can be found in the online version of the journal.