Common atrium: A rare congenital heart anomaly

Ortak atriyum: Ender görülen bir doğuştan kalp anomalisi

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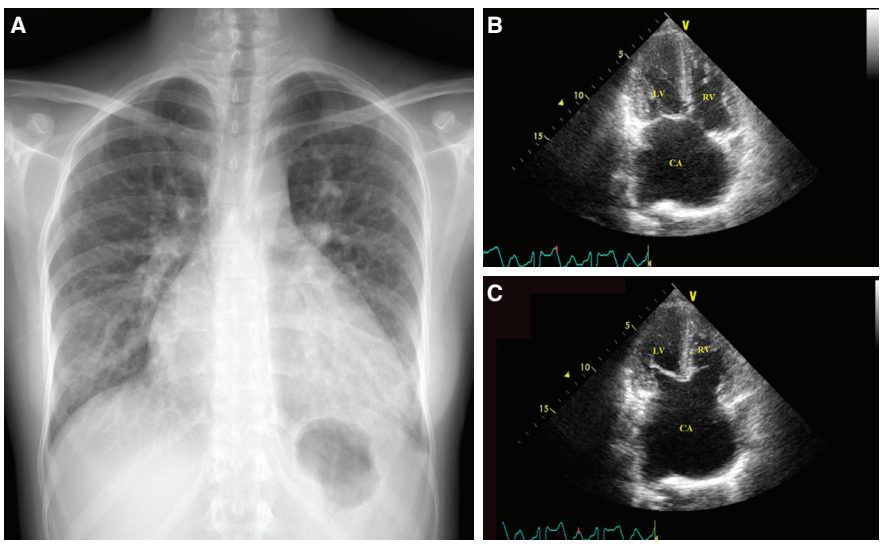
We present a case of an asymptomatic 23-year-old woman who was referred for an abnormal routine electrocardiogram. Her past medical history was normal. She had a previous uneventful pregnancy with a healthy child. During auscultation, a mild holosystolic murmur was heard at all auscultation points, gaining intensity at the apex and mesocardiac area. While S1 was normal, a widely split S2 was heard. Pulse rate was 92/min and arterial blood pressure was 130/85 mmHg. There was no pretibial edema and the lungs were clear. There was no physical congenital abnormality. Her electrocardiogram was in normal sinus rhythm with a complete right bundle branch block. Oxygen saturation measured with finger pulse oximetry was 89%. Chest radiography showed increased pulmonary vascularity, mild cardiomegaly and left atrial enlargement (Figure A). Complete absence of the interatrial septum and normal left ventricular dimensions and functions were detected in transthoracic echocardiography. The main pulmonary artery and right ventricle were dilated and a paradoxical motion of the interventricular septum was observed. Mitral and tricuspid valve attachments to the interventricular septum were on the same anatomic plane, and there was no cleft of the mitral valve (Figure B, C, Video*). Doppler examination revealed mild mitral and moderate tricuspid regurgitation. Systolic pulmonary arterial pressure was 40–45 mmHg. A major vessel opening to the left side of the atrium was thought to be a pulmonary vein. The inferior and superior vena cava were opening normally into the right side of the atrium. The patient was informed about the disease and its progression and referrred for corrective surgery. Common atrium (CA) is a rare congenital anomaly in adults and is also known as single atrium or cor triloculare biventriculare. Rastelli et al. described three characteristic findings of CA: 1) complete absence of the interatrial septum, or a small strand of tissue present in the cephalad wall of a common chamber, 2) absence of interventricular communication, 3) an accompanying cleft in the anterior leaflet of the mitral valve. Similarly, our patient had a common atrium without an interatrial septum and absence of interventricular communication, but did not have a cleft on the anterior mitral leaflet. Patients with CA are usually admitted in late childhood or young adulthood with nonspecific symptoms like dyspnea, palpitation, fatigue or syncope. Interestingly, despite undergoing a challenging process—pregnancy—in her past medical history, our patient remained asymptomatic. Herein we present an asymptomatic patient diagnosed incidentally and showing an unusual disease presentation. According to the current data, echocardiography is the first line diagnostic tool, and corrective surgery is the mainstay of therapy. Additionally, early diagnosis is crucial before progression to Eisenmenger syndrome, which is a contraindication for corrective surgery.



Figures– (A) Chest X-ray revealed cardiomegaly and left atrial enlargement. Echocardiogram showing CA with no interatrial septum and absence of interventricular communication, systolic **(B)** and diastolic **(C)** images from apical view. LV: Left ventricle; RV: Right ventricle; CA: Common atrium. **Supplementary video files associated with this presentation can be found in the online version of the journal.*