



Demonstration of Dextrocardia, Corrected Transposition of Great Arteries and Pulmonary Stenosis with Using Magnetic Resonance Imaging

Dekstrocardi, Düzeltilmiş Büyük Arterlerin Transpozisyonu ve Pulmoner Darlık Kombinasyonunun Manyetik Rezonans Görüntüleme ile Gösterilmesi

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A 70-year-old man without a medical history was admitted to the outpatient cardiology clinic with dyspnoea. He had no chest pain or palpitations. His family history was unremarkable. On physical examination, his skin colour was found to be pale. His blood pressure was 130/65 mmHg and heart rate was 60 bpm. There were no suspicious breathing sounds of the lungs. Electrocardiogram revealed a normal sinus rhythm and signs of biventricular hypertrophy. Transthoracic and transesophageal echocardiography showed dextrocardia of the heart, pulmonary stenosis and a normal structure of both ventricles. For further evaluation, magnetic resonance imaging (MRI) was performed. MRI revealed a situs inversus totalis and a mildly impaired function of the right-sided ventricle that its ejection fraction was calculated as 40% and the switched anatomy. An anteriorly positioned aorta was observed on the right side, with a steeply ascending aortic arch to the dorsal side, and the pulmonary artery was located on the left side of the aorta and preceded dorsally (Figure 1A-D). The patient was evaluated by medical team and was discharged after a conservative medical therapy.

Patients who have a complex grown-up congenital heart disease (c-GUCH) should be examined by a medical team. This team should comprise the following physicians: cardiologists, cardiovascular surgeons, paediatric cardiologists and radiologists. For the evaluation of patients with c-GUCH, MRI plays a major and key role in the characterisation of morphology.

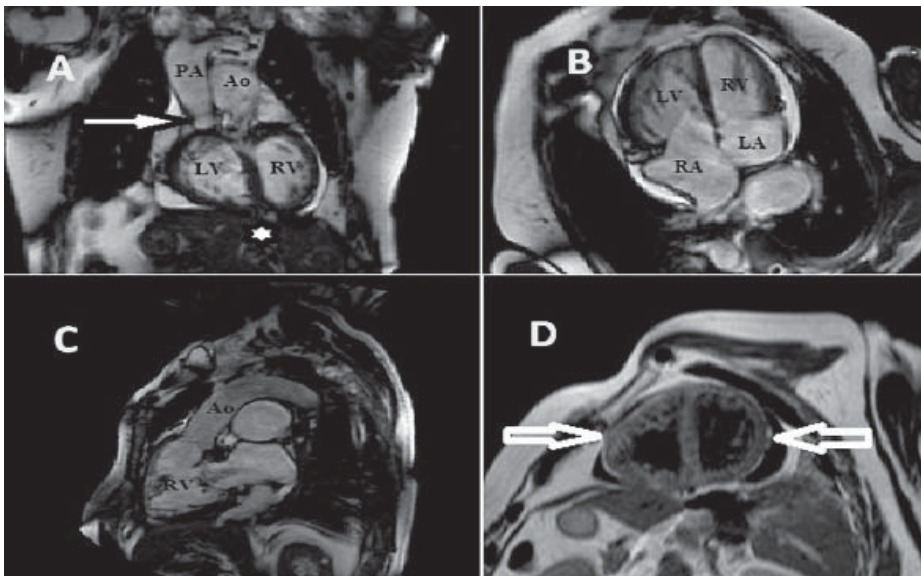


Figure 1. (A) Situs inversus totalis (asterisk) and pulmonary stenosis (arrow), (B) switched anatomy, (C) sagittal axis of the anatomical right ventricle and aorta, (D) vertical axis of the ventricles.

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