Right coronary artery intervention with mirror image in a patient with dextrocardia

Dextrokardili hastada ayna görüntüleri ile sağ koroner artere girişim

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Dextrocardia is a rare condition of cardiac congenital anomaly. In a retrospective study (1), 5,539 fetal echocardiograms were screened over a 22-year period and overall 46 cases of dextrocardia were revealed. We aimed to present the right coronary artery intervention in a patient with dextrocardia and acute coronary syndrome.

Fifty-three years old woman was admitted with chest pain to our hospital emergency department. She had no known coronary artery disease (CAD). She has suffered pain in right side of her chest during exercise for six months. She has had more severe and prolonged chest pain at this morning. Her heart sounds were barely heard on left side of her chest. Dextrocardia was detected on the chest X-ray. Moderate ST-segment depressions were determined in right precordial leads on electrocardiography (ECG) recorded in emergency room (Fig. 1). Troponin T levels were slightly increased.

She was admitted to coronary care unit with diagnosis of non-ST-elevation acute coronary syndrome. Coronary angiography was performed after medical treatment. On her coronary angiography all routine views and images were obtained with mirror image. The 95% stenosis of right coronary artery diameter was detected (Fig. 2). After balloon pre-dilatation, 3.5 X 10 mm stent was implanted (Fig. 3). No complications occurred during hospitalization. Diagnosis of situs inversus totalis

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Figure 1. The electrocardiogram recorded in emergency room with right precordial leads

Figure 2. The right coronary angiography in a left anterior oblique view before intervention
was confirmed by ultrasonography. Her exercise test was normal after 1 month.

The risk of coronary atherosclerosis in dextrocardia is similar to that of the general population. However, coronary angioplasty in patients with dextrocardia is rarely reported. Only ten cases with dextrocardia who underwent coronary interventions were reported in the literature (2, 3). Our case was interesting for its mirror image and ST-segment depression in right precordial leads.

References