

A single coronary artery branching out a hyper-dominant right coronary artery and small left coronary arteries

Hiperdominant sağ koroner arter ve küçük sol koroner arterlere dallanan tek koroner arter

We described single coronary artery (SCA) in a 62-year-old male patient with chest pain who would have undergone a complicated non-cardiac operation (Fig. 1-2, Video 1. See corresponding video/movie images at www.anakarder.com). In angiographic series, SCA is a rare congenital anomaly with an incidence of 0.024 percent. Three types of SCA have been characterized according to the origination from left, right or non-coronary aortic sinuses by Shirani and Roberts in an actual classification. The authors have determined up to 20 different subclasses of SCA so far (type IA1, B1-4 or type IIA1, B1-4, C1-4, D1-3, E1-2). However, SCA arising from non-coronary aortic sinus (type III) or above the aortic sinuses (unclassified) have not been defined yet. The pathway of the branches of SCA indicates its prognosis, which is worst if a major coronary artery courses between aorta and pulmonary artery or inside the heart. In our case, the SCA ramified a hyper-dominant right coronary artery and small left coronary arteries after a short main segment. We suggested that it is a type IIB1 SCA which is benign, originating from right aortic sinus and

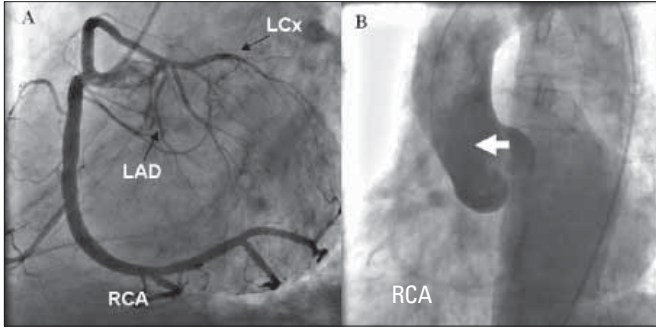


Figure 1. A) Left lateral angiographic view of the single coronary artery. RCA is hyperdominant and supplies the left ventricular apex. LAD and LCx are rudimentary (black arrows) **B)** Left caudal oblique (450-150) aortography view shows that the solitary ostium (thick white arrow) may not originate from right or left aortic sinuses.

RCA - right coronary artery, LAD - left anterior descending artery, LCx - left circumflex artery

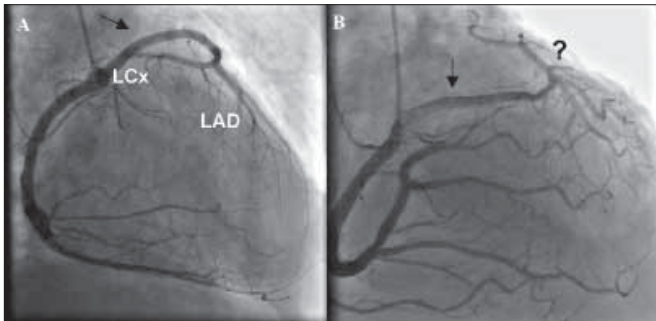


Figure 2. The right oblique angiographic view (A) shows that the distribution of the left anterior descending artery (LAD) and left circumflex artery (LCx) is atypical and seems to course in opposite directions. The anteropostero-cranial view (B) does not clearly separate LAD and LCx (question mark). Left main coronary artery (black arrows) is very long (A,B)

coursing anterior to the aorta and pulmonary artery and/or right ventricle. The appearance of higher location of the solitary ostium needs more definitive evaluation to characterize a new type of SCA (Fig. 1).

It has a vital importance to define some subclasses of SCA for surgical treatment regardless of whether or not significant coronary atherosclerosis is present because they could be associated with serious consequences such as angina pectoris, myocardial infarction, ventricular arrhythmia and sudden death.

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Severe tricuspid stenosis caused by myxoma originated from septal leaflet of tricuspid valve

Triküspid septal yapraktan köken alan ciddi triküspid darlığına neden olan miksoma olgusu

A 26-year old man was admitted to our clinic with progressive symptoms of dyspnea and palpitation. He had no history of any diseases. On his physical examination blood pressure was 110/70 mmHg, pulse rate was 80/min and the diastolic murmur was heard on the mesocardiac area. Electrocardiography, telecardiography and laboratory values were all normal. Transthoracic echocardiography revealed a 4.1x4.6 cm mass on the atrial side of the right heart originating from the septal leaflet of the tricuspid valve (Fig. 1). Although the mass has relatively homogeneous structure some parts of mass has increased echogenicity, some parts of mass has echolucent area, which were concordant with calcification and hemorrhage, respectively. In each diastole the mass protrudes into

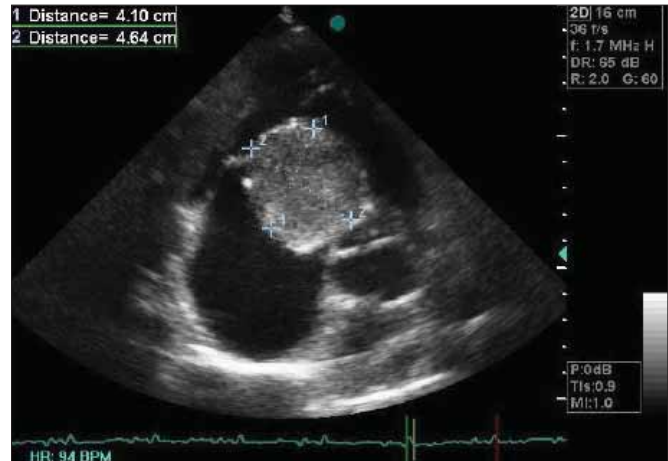


Figure 1. Preoperative echocardiographic four-chamber view of a large echo dense 4.1x4.6 cm mass on the atrial side of the right heart originating from the septal leaflet of the tricuspid valve