## A rare localization of muscular bridge causing myocardial ischemia

## İskemiye sebep olan miyokardiyal kas bandının nadir bir lokalizasyonu

The coronary arteries are normally localized subepicardially and are visible on the surface of the heart. Myocardial bridge is a most common congenital abnormality of coronary arteries. A segment of coronary artery travelling trough myocardial tissue, which is called tunneled artery, exhibits compression during systole. Generally, it is a benign condition and often asymptomatic, but it may also be accompanied by chest pain, dyspnea, myocardial infarction, ventricular arrhythmias and/or sudden death. We report a rare localization of myocardial bridge in the right coronary artery, which caused myocardial ischemia.

A 51-year-old male patient was admitted to our clinic with the complaint of chest pain on exertion for one month. His physical examination revealed blood pressure of 120/70 mmHg, pulse rate of 70 per minute and system examinations were normal. On the electrocardiogram, there was no abnormality. Transthoracic echocardiography revealed infero-posterior wall hypokinesia. Exercise stress testing was performed and it revealed horizontal ST segment depression of 1 to 2 mm in leads II, III, aVF and V5-6. Upon this, coronary angiography was done. Coronary angiography showed stenoses of the mid left anterior descending artery-30%, 1<sup>st</sup> diagonal artery-50%, distal circumflex artery - 50%, and the typical 'milking effect' for myocardial bridge in right coronary artery (RCA), causing 70% stenosis at systole (Video 1. See corresponding video/movie images at www.anakarder.com). Ventriculography was normal. In our case, myocardial bridge was observed in RCA that has been reported in the literature rarely.

**Video 1.** The typical 'milking effect' for myocardial bridge is seen in right coronary artery and cause 70% stenosis at systole

Gülaçan Tekin, Ali Rıza Erbay, Hasan Turhan<sup>1</sup> Department of Cardiology, Faculty of Medicine, Bozok University, Yozgat Clinic of Cardiology, Gözde Hospital, Malatya-*Turkey* 

Address for Correspondence/Yazışma Adresi: Dr. Gülaçan Tekin Bozok Üniversitesi Tıp Fakültesi, Kardiyoloji Anabilim Dalı, Yozgat-*Türkiye* Phone: +90 354 212 70 60 Fax: +90 354 217 71 50 E-mail: gulacantekin@hotmail.com

## Available Online Date/Çevrimiçi Yayın Tarihi: 22.06.2012

© Telif Hakkı 2012 AVES Yayıncılık Ltd. Şti. - Makale metnine www.anakarder.com web sayfasından ulaşılabilir.

©Copyright 2012 by AVES Yayıncılık Ltd. - Available on-line at www.anakarder.com doi:10.5152/akd.2012.176

Unsuccessful elective coronary angiography in a hypertensive patient: Aortic coarctation with aberrant right subclavian artery arising from descending aorta

Hipertansiyonu olan hastada başarısız koroner anjiyografinin nadir bir nedeni: aort koarktasyonu ve desendan aorta orijinli aberan sağ subklaviyan arter birlikteliği A 65-year-old male patient was admitted to the cardiology clinic because of onset of effort angina for 10 days. Clinical examination did not reveal any pathologic findings including blood pressure of 120/80 mmHg measured on right brachial artery. Biphasic T waves in anterior derivations were noted on electrocardiogram. Echocardiography demonstrated normal left ventricular systolic function, mild left ventricular concentric hypertrophy and mild aortic regurgitation (Video 1. See corresponding video/movie images at www.anakarder.com). A 6F introducer sheath was placed in right femoral artery. Because guidewire did not advance in descending aorta, aortography was done. Aortographic examination was consistent with aortic coarctation (Fig. 1), thus we decided to perform



Figure 1. Antero-posterior view of aorta and aberrant right subclavian artery (white arrow) demonstrates aberrant right subclavian artery



Figure 2. Aortography imaging of aberrant right subclavian artery demonstrated by white arrow and poorly identifiable origin of collateral circulation