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%, 1st 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

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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

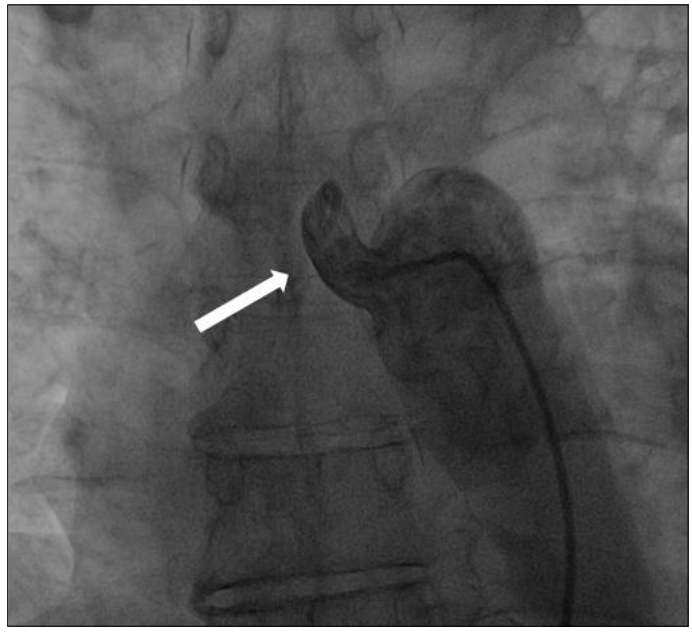

Figure 1. Antero-posterior view of aorta and aberrant right subclavian artery (white arrow) demonstrates aberrant right subclavian artery

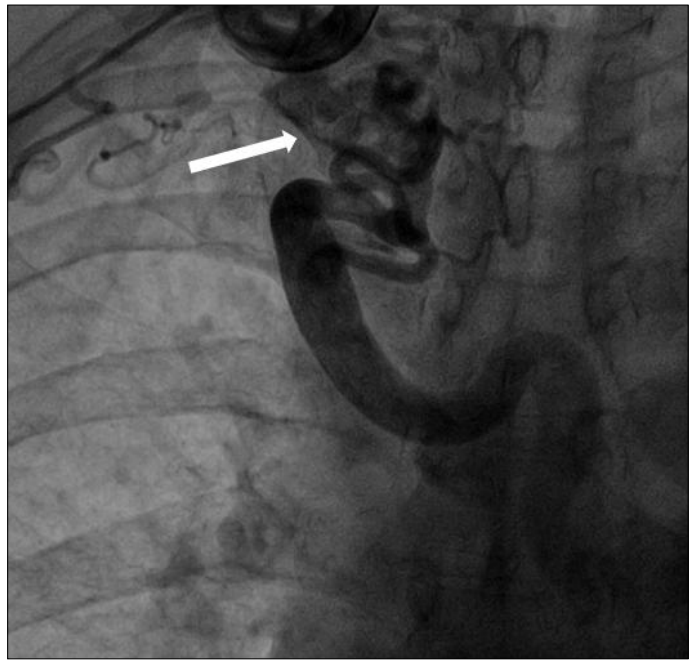

Figure 2. Aortography imaging of aberrant right subclavian artery demonstrated by white arrow and poorly identifiable origin of collateral circulation

coronary angiography via right brachial artery. Guidewire and diagnostic catheter directed to the unexpected route rather than ordinary position. Right subclavian artery angiography showed the well-developed collateral circulation from ascending to descending aorta and right subclavian artery arising from descending aorta (Fig. 2, 3. Video 2. See corresponding video/movie images at www.anakarder.com). Therefore, left brachial artery approach was chosen. Although we used different catheters in order to reach ascending aorta (Fig. 4, Video 3. See corresponding video/movie images at www.anakarder.com), we could not succeed. Procedure was aborted and patient was referred to the multislice computed cardiac

Figure 3. Demonstration of aberrant right subclavian artery

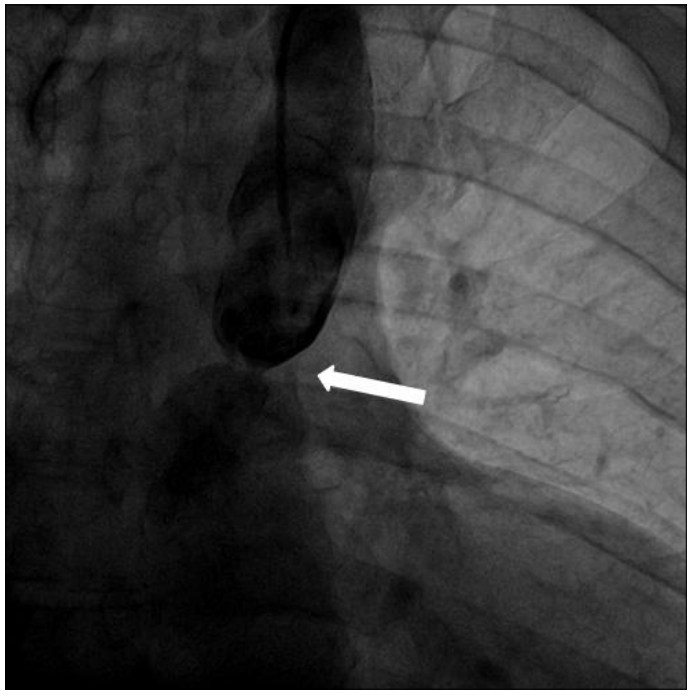

Figure 4. Aortography imaging of aortic coarctation (white arrow)

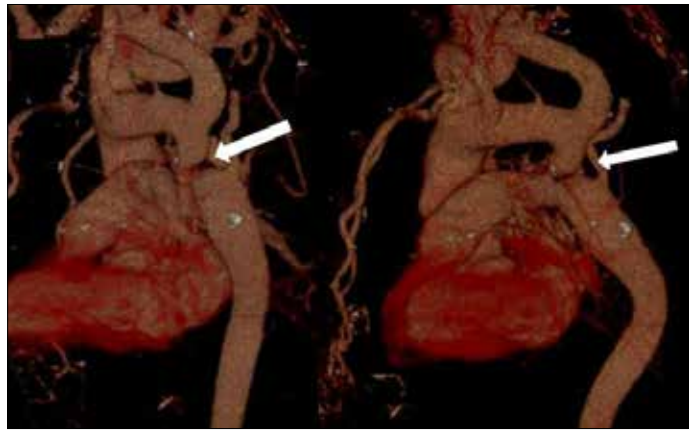

Figure 5. Multislice computed tomography angiography views of aortic coarctation in different positions

tomographic (MSCT) angiography. MSCT demonstrated aortic coarctation and critical left anterior descending artery lesion (Fig. 5). Although decision of stenting of coarctation with bare metal stent rather than graft stent because of increased risk of compromising flow of right subclavian artery and coronary angiography at the same session was taken, patient declined to go ahead.

Video 1. Preserved left ventricular systolic function and moderate left ventricular hypertrophy on transthoracic apical 5-chamber echocardiographic examination on

Video 2. Imaging of aberrant right subclavian artery and collateral circulation in antero-posterior position

Video 3. Demonstration of aortic coarctation in anterior posterior position

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Hydatid cyst of the interventricular septum presenting as supraventricular tachycardia

Supraventriküler taşikardi ile başvuran interventriküler septum yerleşimli kist hidatik

A 55-year-old male presented with palpitation and dyspnea. Past medical history was unremarkable except for frequent palpitations and lasting for several hours approximately every month for the last 2 years. Examination revealed blood pressure of 110/60 mmHg and pulse of 170 bpm without any other abnormality. Electrocardiography (ECG) showed