Woven Left Coronary Artery: Case Report

Woven Sol Koroner Arter

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ABSTRACT Woven coronary artery is a rare coronary anomaly generally considered to be benign. The true incidence of woven coronay anomaly is not known. It is characterized by the twisting course of multiple thin channels along the vessel in any coronary artery with a normal blood flow. A few cases have been reported until now and the cases of woven anomaly are generally adult patients. This anomaly has been shown in both right and left coronary arteries and may be associated with acute coronary syndromes. In this case report, we present a 60-year-old female patient with a woven anomaly in the left anterior descending coronary artery.

Key Words: Coronary vessel anomalies; coronary angiography; angina pectoris

ÖZET Woven koroner arter genellikle selim olarak kabul edilen nadir görülen bir koroner anomalidir. Woven koroner anomalinin gerçek sıklığı bilinmemektedir Normal kan akımlı herhangi bir koroner arterde damar boyunca birçok ince kanalın kıvrımlı seyri ile karakterizedir. Şimdiye kadar birkaç vaka bildirilmiştir ve woven anomali vakalarının çoğunluğu erişkin hastalardır. Bu anomali sol ve sağ koroner arterlerin her ikisinde de gösterilmiştir ve akut koroner sendromla ilişkili olabilir. Bu olgu bildiriminde 60 yaşında kadın hastadaki sol ön inen koroner arterin woven anomalisini sunduk.

Anahtar Kelimeler: Koroner damar anomalileri; koroner anjiyografi; angina pektoris

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oven coronary artery is an extremely rare and clearly undefined coronary malformation.¹ This anomaly is regarded as a benign condition since there is completely normal blood flow after the distal segment of the abnormal coronary artery. We present a 60-year-old female patient with a woven coronary artery anomaly in the left anterior descending (LAD) artery.

CASE REPORT

A 60-year old female patient was admitted to our hospital with chest pain. She had no similar complaints or known coronary artery disease before. The patient had diabetes mellitus, hypertension, smoking history. The electrocardiogram showed ST-segment depression in leads V1-V6. The patient was hospitalized with the diagnosis of unstable angina pectoris. Findings of physical examination and blood tests were unremarkable except for moderate increases in cardiac enzymes. On bedside echocardiography normal cardiac valves functions and anterior wall hypokinesia were noted. In light of those finding, the patient underwent coronary angiography. Coronary angiography performed via the right femoral artery with a Judkins' technique demonstrated a 90% stenosis at the mid-segment of the circumflex coronary artery. Moreover, there was a woven coronary artery anomaly in the LAD artery. In the mid-segment of the LAD, arterial lumen was divided into multiple thin channels, traversing distally with a twisting course along a nearly 2-cm length of coronary segment (Figure 1A, B). Since the patient did not accept further invasive procedures, medical treatment was planned. During 3 months of follow up no problems were encountered.

DISCUSSION

Congenital anomalies of the coronary arteries are reported to occur in 0.6-1.3% of the general population.² Woven coronary artery can be defined as a coronary segment showing the twisting course of multiple thin channels along the vessel in any coronary artery with a TIMI-III blood flow distally. This kind of coronary imaging mimics intracoronary thrombus and spontaneous coronary artery dissection.³ Woven coronary artery cases have only been reported as isolated coronary artery anomaly and in adult patients.⁴⁻⁶ Only in the case report of Yıldırım et al. the woven coronary artery was described as the part of a systemic disease, i.e. Kawasaki disease, in an infant patient of nine months old.⁷

Woven coronary artery can be accepted as a benign condition. It doesn't disturb cardiac functions at all. Therefore it is not necessary to treat this anom-

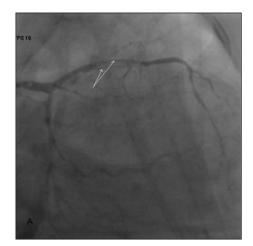


FIGURE 1A: Right anterior oblique (RAO) cranial projection of woven left coronary artery (white arrow).

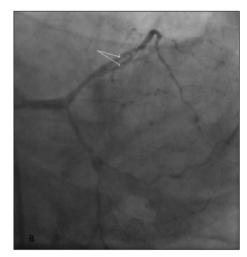


FIGURE 1B: Anterior oblique caudal projection of left coronary artery showing thin channels (white arrow).

aly. In conclusion, although woven coronary artery is very rare, interventional cardiologist should be aware of this extremely rare coronary anomaly.

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