A 45-year-old female, hypertensive and non-diabetic, presented with breathlessness on exertion for six months. Physical examination revealed an average built female with a pulse rate of 80 beats/min and blood pressure of 150/90 mm Hg. Peripheral pulses were normal. Cardiac auscultation revealed regular heart sounds. Her electrocardiogram showed a sinus rhythm with no significant ST-T changes. Echocardiography revealed no regional wall motion abnormalities with left ventricular ejection fraction of 60%. Stress (treadmill) test showed positive result for inducible ischemia by Bruce protocol's at 8 metabolic equivalents (METS). So, she was further investigated for coronary artery disease. Although a benign anomaly, it is important to inform the surgeons to avoid accidentally cross-clamping or transecting the artery during surgery. Some coronary artery anomalies may cause chest pain, heart failure, arrhythmia, and sudden death. These manifestations may be in consequence of the repeated compression of the anomalous artery by a dilated aortic root or of slit-like ostia or of unusual angling as a result of the retroaortic course of the Cx [9]. Myocardial ischemia can occur because of earlier and more aggressive atherosclerosis compared to a normal coronary artery found exclusively in anomalous vessels arising from the right side [10,11]. In a study by Wilkins, 71% of patients with an anomalous circumflex artery had significant coronary atherosclerosis in the proximal portion of the anomalous vessel [12]. An analysis from the Coronary Artery Surgery Study showed that the anomalous circumflex arteries had a significantly greater degree of stenosis than normal arteries [13]. In cases where the anomalous circumflex arteries originate from either the right coronary artery or the right coronary sinus, its course is always retroaortic [14]. The posterior course of the anomalous circumflex coronary artery may predispose this vessel to atherosclerosis in patients with coronary disease. Although a benign anomaly, it is important to inform the surgeons to avoid accidentally cross-clamping or transecting the artery during surgery.
their course at the time of coronary angiography is essential to determine the significance of such findings and to avoid therapeutic complications. The identification of this anomaly demands a high level of anticipation during the performance of selective coronary angiography to ensure that an adequate study is obtained. Failure to recognize and properly demonstrate the anomaly may result in improper therapeutic decisions that may be hazardous to the patients. Special surgical considerations must be made when performing the valvular replacement or coronary artery bypass grafting, if desired, in such patients.

**REFERENCES**


**ARTICLE INFORMATION**

*Correspondence: Shahid Shaikh, DM, Department of Cardiology, Grant Government Medical College and Sir Jamshedjee Jeejeebhoy Group of Hospitals, Mumbai, India. Email: drshakilshaikh@rediffmail.com*  

**Received:** Mar. 19, 2019; **Accepted:** Apr. 04, 2019; **Published:** Jun. 26, 2019

**DOI:** 10.24983/scitemed.hvm.2019.00115

**Ethics Approval and Consent to Participate:** The study is in accordance with the ethical standards of the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

**Funding:** The study did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

**Conflict of Interest:** The authors report no financial or other conflict of interest relevant to this article, which is the intellectual property of the authors.

**Copyright © 2019 The Authors. This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC-BY).**