A Rare Coronary Anomaly: Congenital Absence of the Left Circumflex Artery

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Abstract
Congenital anomalies of the coronary vasculature are usually asymptomatic and rare with an incidence of less than 1% and there are few cases reported of congenital absence of the left circumflex artery. It is important to recognize this anomaly and define the anatomy by left heart catheterization or coronary angiography by computerized tomography when considering percutaneous intervention or coronary artery bypass surgery on patients without a left circumflex artery.

Keywords
Anomalous coronary artery, Congenital anomaly, Left circumflex artery absence

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71 yo male that recently moved to the area from out of state who presented to clinic complaining of increased fatigue, exertional chest pain and dyspnea that resolved with rest. His past medical history is significant for coronary artery disease with a drug eluting stent in the right coronary artery, hypertension, hyperlipidemia, diabetes and history of tobacco and alcohol use.

He had an abnormal stress test in the recent past but refused to have a cardiac cath at that time since his symptoms had temporarily improved. However, when...
catheters, multiple operators and several aortograms (Figure 5) were performed with no sign of the left circumflex artery. It was determined that the patient had a congenitally absent left circumflex artery with a super-dominate right coronary network to supplement the left coronary arteries.

Comments
Congenital anomalies of the coronary vasculature are usually asymptomatic and rare with an incidence of less than 1% [1]. Complete absence of the left circumflex is an extremely rare finding with reported incidence of...
of only 0.003% [2]. There are few cases reported of congenital absence of the left circumflex artery but in each case there is an elongated left main coronary artery (Figure 1), substantial diagonal branches from the left anterior descending artery (Figure 2 and Figure 3), and a super-dominant right coronary artery (Figure 4) to perfuse the lateral wall. It is important to recognize this anomaly and define the anatomy by left heart catheterization or coronary angiography by computerized tomography when considering percutaneous intervention or coronary artery bypass surgery on patients without a left circumflex artery [3].

Disclaimer
None.

Conflicts of Interest
None.

References