Anomalous left circumflex artery: a case report

Background: The general population, just like the majority of the patients in the angiography laboratory, have a predictable anatomy and presentation of the coronary arteries. Only 1.3% of the patients in a number of 126,595 have anatomical anomalies of the coronary arteries. Of the three main coronary arteries, the circumflex artery presents with a great variant of length and distribution. There is gender predominance, study reports findings in favor of the male population (73 cases, 57 male/16 female). There are three types of anomalies of the left circumflex artery (ALCX), among which the most common are the adjacent ostia in the right coronary sinus.1-3

Case report: We present a clinical case of a 59-year-old female, who presented to a tertiary facility due to a first onset of chest pain who was evaluated for an underlying coronary artery disease. Physical examination showed non-specific signs. She had a previous history of hypertension. The diagnostic workout included: laboratory, electrocardiography, echocardiography and coronary angiography. The electrocardiogram had features of left bundle branch block. The heart ultrasound showed global reduction of the LV systolic function, impaired diastolic function which is a consequence of a long life arterial hypertension. Coronary angiography findings: anomalous left circumflex artery (ALCX) adjacent ostia in the right coronary sinus. We did a one month follow up during that period of time she was treated with: ACE inhibitor, beta-blocker, loop diuretic, aldosterone antagonist and aspirin.

Conclusion: The coronary artery anomalies are most often an accidental finding in the catheterization laboratory. Most variations are benign with a variable clinical presentation and prognosis. The anatomical variations in the left circumflex artery are relatively common as in our case the adjacent ostia in the right coronary sinus.

KEYWORDS: coronary artery anomaly, coronary angiography, cardiomyopathy.


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LITERATURE

