Kosuyolu Kalp Derg 2013;16(2):171-172 • doi: 10.5578/kkd.4120

Left Circumflex and Left Anterior Descending Coronary Artery Supplying the Left Ventricular Apex-Double Protection

Sol Ventrikül Apeksini Besleyen Sol Sirkumfleks Arter ve Sol Ön İnen Arter-Çift Koruma

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Dear Editor,

We present an uncommen report in the literature that left circumflex coronary artery and left anterior descending coronary artery both supplies apex.

Various coronary artery anomalies have been described in the literature, with a range of occurrence from 0.2 to 1.2%⁽¹⁾. Although most coronary artery anomalies do not cause myocardial ischaemia and mostly diagnosed incidentally, some of these anomalies can result in angina, myocardial infarction or sudden death⁽²⁾. The left anterior descending coronary artery is the usual source of blood supply to the apex of the left ventricle. In some cases, the left anterior descending coronary artery is shorter and terminates before the left ventricular apex. In these cases, apex is supplied by a posterior descending coronary artery from the right coronary artery⁽³⁾.

In this report, we present a 47-year-old woman with previously mechanical mitral valve replacement due to rheumatic mitral stenosis in whom diagnostic coronary angiography was performed for prosthetic paravalvular leak. Coronary angiography revealed that the left ventricular apex was supplied by both the left circumflex coronary artery and left anterior descending coronary artery (Figure 1). According to our knowledge, this is the uncommen report in the literature that left circumflex coronary artery and left anterior descending coronary artery both supplies apex.

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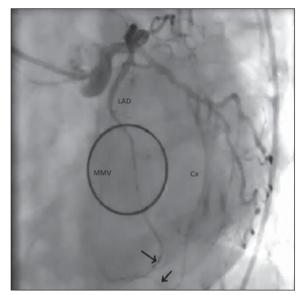


Figure 1. Diagnostic cranial left coronary artery angiography revealed that the left ventricular apex was supplied by the left circumflex coronary artery and left anterior descending coronary artery. MMV: Mechanical mitral valve, Arrows: Distal portion of left anterior descending coronary artery and left circumflex coronary artery.

In this report, diagnostic coronary angiography revealed that the left ventricular apex was supplied by both left circumflex coronary artery and left anterior descending coronary artery.

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