Circumflex Coronary Artery to Aberrant Bronchial Artery Fistula

Sirkumfleks Koroner Arter-Aberran Bronşial Arter Fistülü

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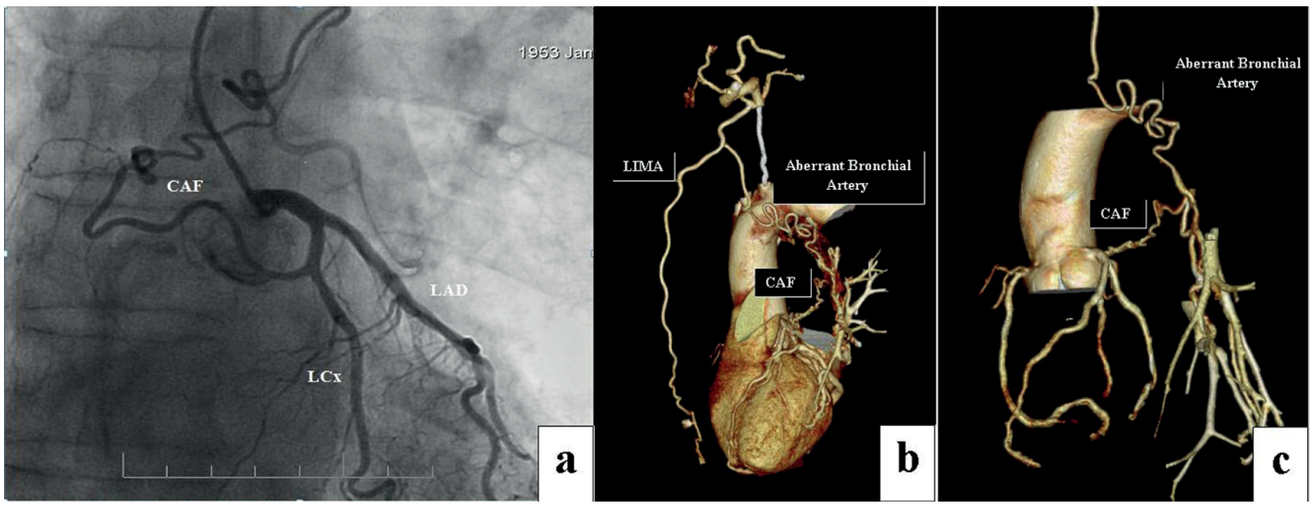


Figure1. Coronary angiography showing coronary artery fistula (CAF) from Left circumflex artery (LCx). Since internal mammary artery injection is not routine, aberrant bronchial artery is not visible clearly (A), Three-dimensional CT angiographic view of the fistula (anterior view)* (B), Three-dimensional CT angiographic view of the fistula (posterior view)* (C). *0,3 mm sections were reconstructed through 3D volume rendered color coded imaging.

A 58 year old male patient was admitted to our clinic with claudication. Leriche syndrome was diagnosed based on physical examination and angiography. Prior to operation coronary angiography was performed during cardiac evaluation due to presence of risk factors and minor ECG findings. Coronary Arterial Fistula (CAF) between Left Circumflex (Cx) coronary artery and bronchial vasculature was observed. Computed tomographic angiography (CTA) was performed for detailed description of the fistula. The fistula originating from the Cx artery origin was travelling medially and inferiorly, deviating to posterior direction at the level of the left atrial appendix and reaching the descending aorta on the anterior aspect. There was an arterial branch originating from the left internal mammary artery (LIMA). It was travelling from the lateral aspect of the innominate vein inferiorly. It was soon deviating to posterior direction on the level of aortic arch, passing medial to the left main bronchus and reaching the descending aorta on the anterior aspect. Both vessels joined on the right anterolateral aspect of the descending aorta 1 cm below the level of carina, then directing to left pulmonary hilus. The joined vessel had a peribronchial distribution pattern. There were no other right or left bronchial arteries. We believe that the vessel originating from LIMA is an aberrant bronchial artery, and there was a fistula between this bronchial artery and Cx coronary artery. The pulmonary anatomy was normal bilaterally (Figure 1).

The patient was asymptomatic, so left untreated and is being followed-up. Aortobifemoral bypass was performed for Leriche Syndrome. Coronary angiography was inconclusive in diagnosing aberrant bronchial artery since it is not routinely visualized. Coronary CTA described the very detailed anatomy.

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