

Anomalous Origin of the Right Coronary Artery from the Left Anterior Descending Coronary Artery in a Patient with Ascending Aortic Aneurysm

Asendan Aort Anevrizmalı Olguda Saptadığımız Sol Ön İnen Arterden Köken Alan Sağ Koroner Arter

Kanber Öcal Karabay¹

¹ Department of Cardiology, Kadikoy Florence Nightingale Hospital, Istanbul, Turkey

¹ Kadıköy Florence Nightingale Hastanesi, Kardiyoloji Bölümü, İstanbul, Türkiye

Dear Editor,

I read with interest the case report reported by Gurkan et al. in April 2012 in this journal⁽¹⁾. The authors presented anomalous origin of the right coronary artery from the left anterior descending coronary artery in patient with ascending aortic aneurysm. There are some points I would like to have comments on.

Single coronary artery effects approximately 0.024% of the population⁽²⁾. This anomaly is generally found accidentally during coronary angiography and accepted as a minor coronary anomaly. However, there are some case reports regarding its potential detrimental effects. In this case the anomalous RCA arising from the mid portion of the left anterior descending artery (LAD). Even though invasive angiography gave some clues, the course of the anomalous coronary artery could have been better visualized with computer-assisted angiography (CTA) angiography. The possibility of mechanic compression of an anomalous artery while crossing between the great arteries (pulmonary artery and aorta) is unlikely that the pulmonary artery with normal pressures could occlude or constrict the anomalous coronary artery distended with systemic pressure⁽³⁾.

Even though, the authors stated that this is the first single coronary artery complicated with aortic aneurysm treated with Benthall procedure, Shioi K et al. in 1995 reported a case managed with modified Benthall procedure⁽⁴⁾. Moreover, there are the other cases with single coronary artery and aortic aneurysm and managed with surgery. Unfortunately, in most cases the surgical technique is not clear.

Yazışma Adresi/
Correspondence

Dr. Kanber Öcal Karabay

Bağdat Caddesi Kızıltoprak No: 61
İstanbul-Türkiye

e-posta
ocalkarabay@hotmail.com

Anomalous Origin of the Right Coronary Artery from the Left Anterior Descending Coronary Artery in a Patient with Ascending Aortic Aneurysm

Asendan Aort Anevrizmalı Olguda Saptadığımız Sol Ön İnen Arterden Köken Alan Sağ Koroner Arter

The increased usage of invasive or noninvasive angiography has been increased our ability to detect coronary anomaly. I believe being the first case is not so important. Instead, presenting this rare coronary anomaly and the surgical technique is important. This case is not everyday case and increased case reports will improve patients' care.

REFERENCES

1. Gurkan U, Canga Y, Ozcan KS. Anomalous origin of the right coronary artery from the left anterior descending coronary artery in patient with ascending aortic aneurysm. *Kosuyolu Kalp Derg* 2012;15:42-4.
2. Lipton MJ, Barry WH, Obrez I, Silverman JF, Wexler L. Isolated single coronary artery: dagnostic, angiographic classification, and clinical significance. *Radiology* 1972;130:39-7.
3. Chaitman BR, Lespérance J, Saltiel J, Bourassa MG. Clinical, angiographic, and hemodynamic findings in patients with anomalous origin of the coronary arteries. *Circulation* 1976; 53:122-31.
4. Shioi K, Nagata Y, Wan R, Aoyama T, Katoh S, Tsuchioka H. Atresia of the right coronary ostium associated with annulo-aortic ectasia-a case of successful surgical repair. *Nihon Kyobu Geka Gakkai Zasshi* 1993;41:2283-7.