

급성 하벽 심근 경색증으로 발현된 우측 관상동맥 기형 질환 1례

김형준 · 김동규 · 원정일 · 천종호 · 조문숙 · 김영일 · 김병옥 · 이견주

= Abstract =

Acute Inferior Wall Myocardial Infarction as a Result of Anomalous Origin of the Right Coronary Artery from the Left Sinus of Valsalva

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The incidence of anomalous aortic origin of the coronary arteries in the general population is unknown. In recent reports from various laboratories, the incidence was between 0.6-1.2% in patients referred for coronary arteriography.

Anomalous origin of the right coronary artery from the left sinus of Valsalva is reported to constitute from 6% to 27% of all coronary anomalies. For many years pathologists classified it as a minor anomaly of no clinical importance. Recently, manifestations of myocardial ischemia have been described in patients with this anomaly in the absence of additional atherosclerotic or other disease processes. These manifestations have included acute myocardial infarction, angina pectoris, syncope, nonfatal ventricular fibrillation, and sudden death.

We report a case of 56-year-old male with the anomalous origin of the right coronary artery from the left sinus of Valsalva, who had been admitted due to severe substernal chest pain and acute inferior wall myocardial infarction.

The coronary angiography revealed that the right coronary artery originated from the left coronary sinus without significant atherosclerotic narrowing. The anomalous right coronary artery passed anteriorly between pulmonary artery and aortic root without significant coronary obstruction.

KEY WORDS : Anomalous origin of the right coronary artery · Coronary anomalies · Acute myocardial infarction.

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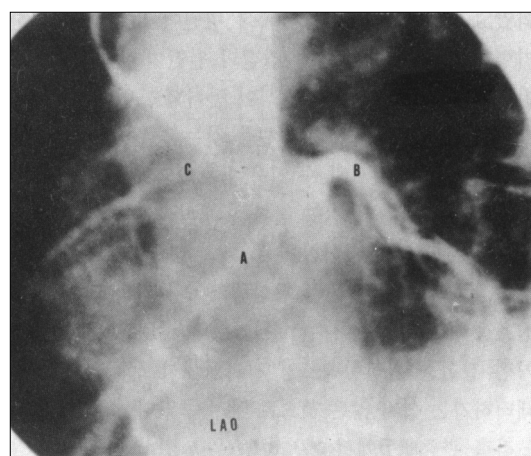


Fig. 2. The left coronary angiogram with left anterior oblique(LAO) view showed the left anterior descending artery(A), the left circumflex artery (B) and the right coronary artery(C) originated from the left coronary sinus.

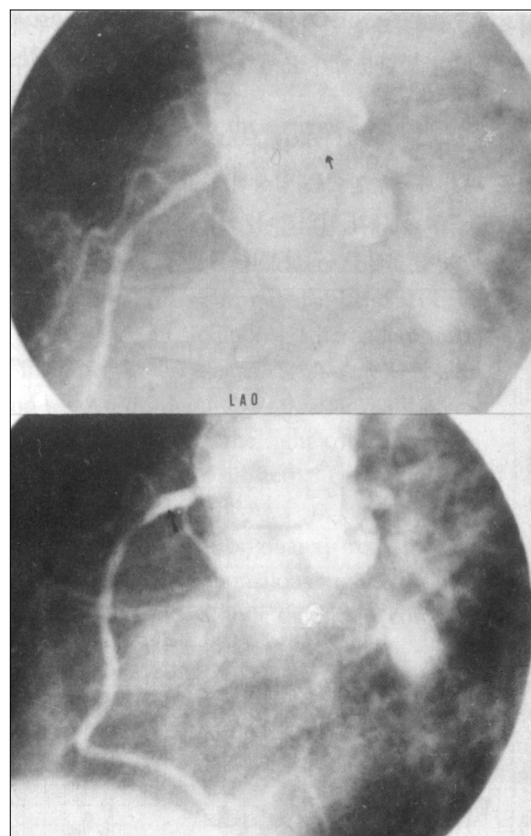


Fig. 3. Selective right coronary angiogram with left anterior oblique(LAO) view showed that the right coronary artery(black arrow) originated from the left coronary sinus and ran anteriorly between pulmonary artery and aorta without significant obstruction.

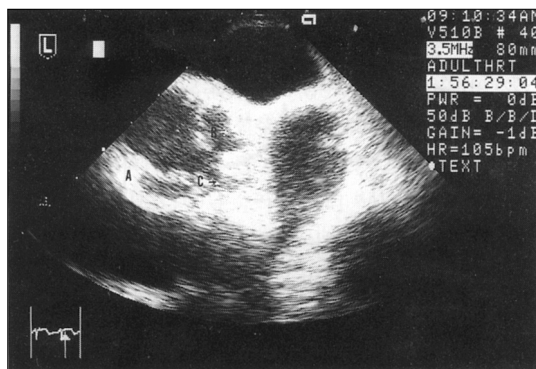


Fig. 4. A transesophageal echocardiographic basal shortaxis view revealed that the right coronary artery originated from the left coronary sinus and ran parallel anterior to the left main coronary artery(A. aorta, B. the left main coronary artery, C. the right coronary artery).

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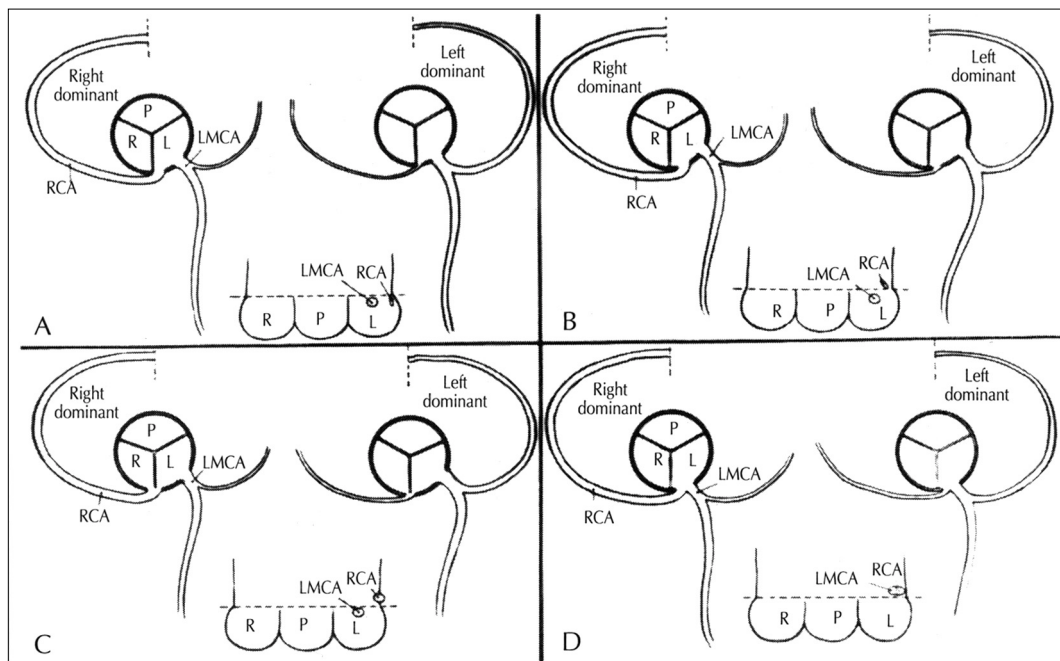


Fig. 5. Coronary anatomy in cases of anomalous origin of the RCA illustrating both orifice and left circumflex coronary artery dominance.

A : Anomalous origin of the RCA from behind the left sinus of Valsalva.

B : Anomalous origin of the RCA from above the left sinus of Valsalva.

C : Anomalous origin of the RCA from above the commissure between the right and left sinus of Valsalva.

D : Anomalous origin of the RCA from a common ostium with the LMCA straddling the left coronary sinus and the R-L commissure

RCA : right coronary artery, LMCA : left main coronary artery, L : left coronary sinus, R : right coronary sinus,

P : posterior coronary sinus

From Kragel AH, Roberts WC : Anomalous origin of either the right or left main coronary artery from the aorta with subsequent coursing between aorta and pulmonary trunk : Analysis of 32 necropsy cases. Am J Cardiol 62 : 771-777, 1988

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요약

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