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Bland-White-Garland Syndrome Discovered in an Elderly Man

Vincenzo Russo, MD; Anna Chiara Musuraca, MD; Cesare La Palombara, MD; Giuseppe Di Pasquale, MD; Rossella Fattori, MD

A 71-year-old man with a history of hypertension and dyslipidemia underwent emergency department due to dyspnea and chest discomfort. Chest radiography revealed cardiomegaly and signs of pulmonary congestion, whereas the ECG was consistent with recent myocardial injury (antero-septal and lateral). Cardiac catheterization showed a huge right coronary artery (RCA) with left coronary artery collateralization.

The multidetector computed tomography scan showed an anomalous origin of left coronary artery from the pulmonary trunk, with a tortuous and dilated RCA and right-to-left collateralization. The patient refused surgical correction.

Bland-White-Garland syndrome, also known as ALCAPA (anomalous origin of left coronary artery from the pulmonary artery), is a rare but serious congenital coronary anomaly that

affects 1 in 300 000 births. Approximately 90% of patients with this malformation die within the first year of life as the result of fatal intractable heart failure and ischemia. Very few patients reach adulthood, and survival beyond infancy depends on the development of adequate collaterals from the RCA. Significant RCA dilation has been seen in adults.

These images (Figure 1) were taken of a 71-year-old man, which is the oldest one reported in medical literature. Multidetector computed tomography is very helpful for detection and anatomic definition of coronary anomalies, especially if complex, as shown in this case.

Disclosures

None.

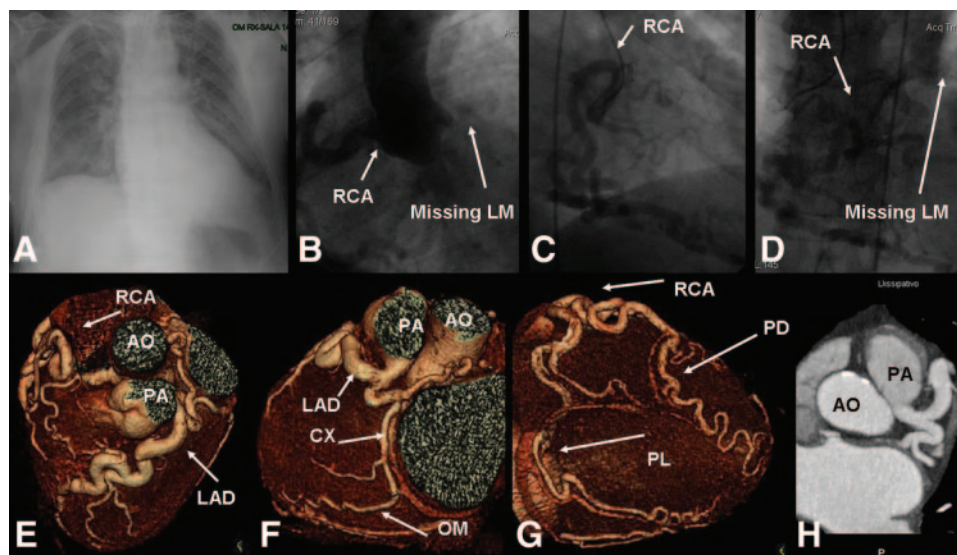


Figure. A, Chest radiograph shows cardiomegaly and signs of pulmonary congestion. B through D, Coronary angiography images show the absence of left coronary artery (missing left main [LM]) and a huge RCA. E through H, Multidetector computed tomography images show an anomalous origin of the left coronary artery from the pulmonary trunk, with a tortuous and dilated RCA, which provides 2 collateral branches, from the posterior descending artery (PD) to the left anterior descending coronary artery (LAD) and from the postero-lateral artery (PL) to the obtuse marginal branch. CX indicates circumflex coronary artery; OM, obtuse marginal branch; AO, aorta; PA, pulmonary artery.

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