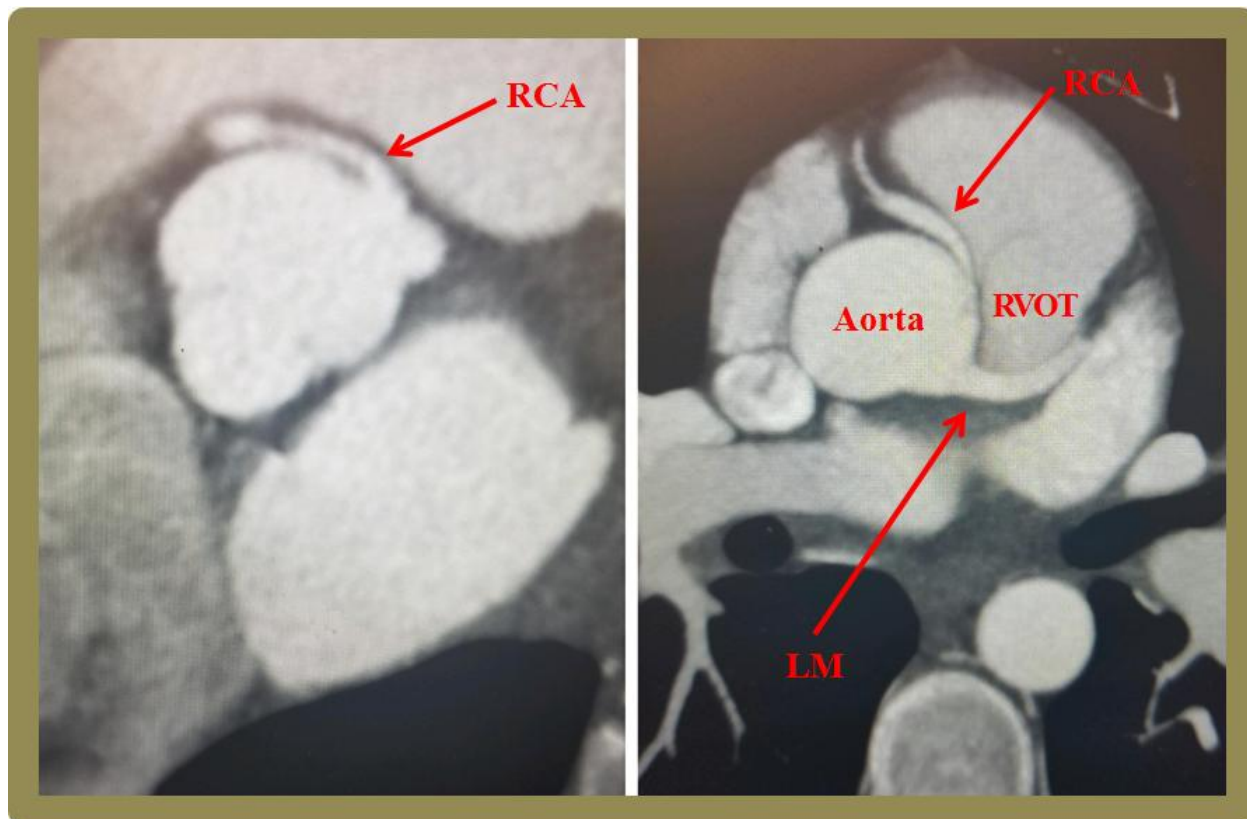


## Anomalous Coronary! Is It Time To Panic!

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### Description

The image shows the right coronary artery (RCA) originating from the left coronary cusp adjacent to the left main coronary artery (LM) on CT angiography. It courses anterior to the aorta, and posterior to the right ventricular outflow tract (RVOT), which may expose it to compression resulting in ischemia, especially with physical exertion.

Anomalous coronary artery origin is a leading cause of sudden cardiac death in athletes, surpassed only by hypertrophic cardiomyopathy, with an incidence of 0.3 to 1.3% of the population (1). Most anomalies are not clinically significant and are discovered incidentally on a coronary or CT angiography (2). Other coronary anomalies have been associated with increased

risk of sudden cardiac death, especially those which arise from the opposite coronary sinus, and may need to be surgically corrected (3). Multimodality imaging is often necessary to identify the origin and the course of an anomalous coronary artery and plan surgery (4).

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<https://cardiofellows.com/newsletter-april-2019.html>

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## **References:**

1. Link MS. Sudden cardiac death in the young: Epidemiology and overview. *Congenit Heart Dis.* 2017 Sep;12(5):597-599.
  2. Angelini P, Velasco JA, Flamm S. Coronary anomalies: incidence, pathophysiology, and clinical relevance. *Circulation.* 2002 May 21;105(20):2449-54.
  3. Kochar A, Kiefer T. Coronary Artery Anomalies: When You Need to Worry. *Curr Cardiol Rep.* 2017 May;19(5):39.
  4. Gräni C, Buechel RR, Kaufmann PA, Kwong RY. Multimodality Imaging in Individuals With Anomalous Coronary Arteries. *JACC Cardiovasc Imaging.* 2017 Apr;10(4):471-481.
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