The best approach to repair anomalous origin of the right coronary artery

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I read with interest the manuscript on the technique of minimally invasive approach to perform a right internal mammary-artery-right coronary artery bypass in patients with anomalous origin of the right coronary artery [1]. This technique is ingenious and certainly unique. However, I don’t believe this is the right approach for patients with this disorder.

The issue with these patients is that the anomalous coronary comes off the left coronary cusp usually above the true left main coronary. This usually is a slit-like orifice and then the artery itself comes between the aorta and the pulmonary artery. This anatomy often leads to sudden death. The issue here is during exercise it is thought that the coronary artery can be compressed by the pulmonary artery and cause myocardial ischaemia. Techniques of bypass certainly can be done simply. Unfortunately, the native flow of this vessel is totally normal. As a result, the internal mammary artery tends to become aetritic since its flow is not needed except in rare circumstances.

We have had this experience in a group of patients that we have reported previously [2]. We had two situations where internal mammary arterial bypasses had been performed and unfortunately both became aetritic. They still required the standard operation which is unroofing in one case and transposition in the other to solve the situation. Subsequent to that publication, we have had two other similar circumstances. Therefore, we would conclude that internal mammary arterial bypass is not the appropriate approach for this disorder.

REFERENCES