It is widely recognized that an in situ RITA may not always reach the PDA, even when harvested in a skeletonized fashion, and it is difficult to use even as a free graft due to technical considerations arising from the proximal anastomosis to the aorta. Moreover, we think the average RCA is not clinically equivalent to the left-sided branches. The RCA is often a small, calcified, and hence suboptimal target.

The choice of location for the second arterial graft should be individualized according to the dominance of the circulation; the size of the branches arising from the RCA; and, most importantly, the runoff and myocardial mass supplied by each target vessel. The importance of this last criterion is highlighted by the fact that even saphenous veins exhibit better patency rates when grafted to the left anterior descending artery compared with the RCA. In general, the lateral wall constitutes a better potential second target due to the fact that the PDA usually supplies only one-third of the interventricular septum. This was advocated by Gaudino and colleagues in a recent article. Ultimately, location of the second arterial graft should be guided by the extent of viable myocardium at risk in each territory.

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