

1157 **Staged Revascularization Beginning With PCI for a Collateral-Donor RCA CTO in Cardiogenic Shock
Complicating STEMI With a Severely Calcified Left Main–LAD Lesion**

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A 76-year-old man was emergently admitted with severe chest pain and dyspnea. Despite high-flow oxygen therapy, adequate oxygenation could not be maintained, and he presented with profound hypotension (systolic blood pressure in the 70 mmHg range). Electrocardiography demonstrated anterior ST-segment elevation myocardial infarction (STEMI), and cardiogenic shock (Killip class IV) was diagnosed.

After endotracheal intubation, an intra-aortic balloon pump (IABP) was inserted, and emergent coronary angiography was performed. Angiography revealed a 90% stenosis in the proximal left anterior descending artery (LAD), a 75% stenosis of the left main coronary artery (LMCA), a 75% stenosis in the left circumflex artery (LCX), and a chronic total occlusion (CTO) of the proximal right coronary artery (RCA). Well-developed septal collateral vessels from the RCA supplied the LAD territory. In addition, severe calcification extending from the LMCA to the proximal LAD was identified, making immediate culprit PCI technically challenging and associated with a high procedural risk.

Considering the patient's complex coronary anatomy and hemodynamic instability, initial intensive medical therapy was provided to stabilize heart failure and systemic circulation. Because the RCA CTO served as the major collateral donor to the LAD, PCI for the RCA CTO was performed first to preserve and augment myocardial perfusion. After clinical stabilization, staged PCI for the severely calcified LMCA-LAD lesion was successfully undertaken.