A 58-year-old woman presented to the emergency department with acute onset, substernal chest pain. A 12-lead electrocardiogram revealed ST elevation in inferior leads. Echocardiography showed inferior wall asynergy of left ventricle. We diagnosed this patient as acute myocardial infarction and performed emergency coronary angiography. Left coronary artery was intact, but we could not find out RCA. Using several catheter with right coronary cusp (RCC) and non coronary cusp (NCC). Finally aortography revealed RCA was originated from left coronary cusp (LCC) but we could not engage the catheter selectively. Then we checked emergency coronary CT angiography and it revealed that RCA was originated from LMT. Then we engaged 6Fr JL4 to LCA and inserted guidewire to LAD, also wiring with another guidewire using Crusade K and crossed the guidewire to distal RCA. Angiography showed 99% stenosis of mid RCA and PCI was performed with placement of drug eluting stent.