

1149 **Successful Bailout PCI for Catheter-Induced Extensive Coronary Dissection in a Patient with Spontaneous Coronary Artery Dissection**

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A 34-year-old woman was admitted with acute chest pain 11 days after delivering her second child. Electrocardiography demonstrated ST-segment elevation in leads III and aVF and ST-segment depression in leads V2–V6. Her symptoms and electrocardiographic abnormalities improved after administration of an intracoronary vasodilator; however, cardiac biomarker levels subsequently increased. Coronary angiography (CAG) demonstrated 99% stenosis with delayed distal flow in the distal left circumflex artery (LCx), consistent with spontaneous coronary artery dissection (SCAD)-related inferior myocardial infarction. During diagnostic CAG, a new dissection developed at the LCx ostium, which was considered catheter-induced. Because of recurrent chest pain and the risk of acute coronary occlusion due to progression of the iatrogenic dissection, emergency percutaneous coronary intervention (PCI) was performed.

Because the short left main trunk (LMT) made stable engagement of the guiding catheter difficult, the initial guidewire entered the subintimal space, providing support for the guiding catheter. A second guidewire was then successfully advanced into the true lumen. Intravascular ultrasound (IVUS) demonstrated an extensive coronary dissection accompanied by a large intramural hematoma extending from the LCx ostium to the mid LCx. To restore distal coronary flow and decompress the intramural hematoma, cutting balloon fenestration was performed at the posterolateral branch bifurcation. Although successful re-entry improved distal coronary flow, true lumen expansion remained insufficient because of the extensive proximal entry tear. Therefore, the entire dissected segment was sealed with drug-eluting stents. The post-procedural course was uneventful, without heart failure or mechanical complications, and the patient was discharged on hospital day 7.

Catheter-induced coronary dissection is a rare but potentially catastrophic complication of coronary angiography and PCI. Management becomes particularly challenging in patients with underlying SCAD because of the fragility of the vessel wall and the risk of further dissection propagation. This case highlights the importance of prompt recognition and an IVUS-guided bailout strategy incorporating cutting balloon fenestration followed by definitive stent implantation.