

C-01 Stentless Percutaneous Coronary Intervention for Acute Coronary Syndrome Associated
with Coronary Artery Aneurysms: A Case Report

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[Purpose] Coronary artery aneurysms (CAAs) are associated with thrombotic complications; however, the optimal revascularization strategy for acute coronary syndrome (ACS) remains uncertain. We report a case of ACS associated with CAAs successfully treated with stentless percutaneous coronary intervention. [Method] A 47-year-old man presented with sudden-onset nocturnal chest pain. Nine months before, he had been diagnosed with dilated cardiomyopathy after hospitalization for new-onset heart failure. Coronary angiography at that time demonstrated CAAs with diffuse calcification involving segments #1-3, #5-6, and #11 without significant stenosis to explain his severe left ventricular dysfunction. Therefore, anticoagulants or antiplatelet agents were not initiated. Emergency coronary angiography for ST-segment elevation myocardial infarction demonstrated total occlusion of segment #2. Repeated aspiration thrombectomy restored TIMI grade 3 flow. Intravascular ultrasound demonstrated residual thrombus but a well-preserved vessel lumen. Therefore, stent implantation was deferred. [Result] Warfarin therapy was initiated after PCI, and the patient was discharged without complications on hospital day 16. The ACS and preceding left ventricular dysfunction were considered to have resulted from recurrent coronary thromboembolism within the CAAs. No evidence of IgG4-related disease or systemic vasculitis was identified, and antecedent Kawasaki disease in childhood was considered a possible etiology of the CAAs. [Conclusion] This case suggests that recurrent coronary thrombosis within CAAs was the cause of both ACS and chronic left ventricular dysfunction. A stentless PCI strategy using aspiration thrombectomy alone may be a feasible treatment option in selected patients with ACS associated with CAAs.