

1071 A successful bail-out case from sudden onset of no flow phenomenon with unknown origin in whole left coronary artery

An 88-year-old female had a worsening exertional chest discomfort and coronary computed tomography angiography (CTA) showed significant stenosis in the left anterior descending (LAD) artery accompanied with severe calcification. Coronary angiography (CAG) also demonstrated severe stenosis in mid and proximal segment of the LAD similarly to the findings of CTA, and we conducted percutaneous coronary intervention (PCI). A 6Fr Hyperion SPB3.5 guiding catheter was a little bit deeply engaged through the left coronary artery, we passed an initial guidewire to the high lateral artery, and a second guidewire to the LAD. Because the patient suddenly complained chest pain at that time, we checked CAG and coronary blood flow appeared in neither LAD nor left circumflex arteries. Soon after this phenomenon, her hemodynamics collapsed. Her systolic blood pressure persisted at about 50-60mmHg, which caused depressed level of her consciousness. Therefore, we promptly established a veno-arterial extracorporeal membrane oxygenation (VA-ECMO) system for stabilization of the hemodynamics. Under extracorporeal oxygenation support, CAG showed coronary blood flow, which recovered similarly to that seen on the initial angiography in the left coronary artery. We resumed PCI and deployed two drug-eluting stents, resulting in a favorable blood flow. After PCI, she was promptly weaned off VA-ECMO. And she was discharged on foot 9 days after PCI without any neurological sequelae.

There are many causes of sudden coronary flow disturbance during PCI, such as coronary dissection, distal embolism, vasospasm, and reduced driving pressure in coronary arteries. However, we could not detect any evidences which suggested those causes of sudden coronary flow disturbance in our case. Therefore, we would like to discuss about the supposed causes of this pathological entity in our case.