A case of acute myocardial infarction (AMI) due to thrombotic coronary occlusion of right coronary artery aneurysm undergone percutaneous coronary intervention (PCI)

The patient was a 55-year-old Japanese man. His risk factor for coronary artery disease included hyperlipidemia, hypertension, smoking and obesity. In 2012 he had experienced myocardial infarction which culprit lesion was in the right coronary artery (RCA) #4AV. Coronary angiography showed diffuse coronary artery ectasia in the RCA. A coronary artery aneurysm was observed on the proximal side of the RCA #4AV and left circumflex. RCA was occluded at the distal side of the aneurysm. We performed PCI using bare metal stent. In January 2017, he had recurrence AMI. Coronary artery aneurysm was occluded by large amount of thrombus. We performed thrombectomy repeatedly, using aspiration catheter and balloon dilatation. After coronary flow restored, DCB was dilated using Sequent Please 2.5×20 mm. After DCB coronary angiography revealed no reflow phenomenon. Then, Guidewire was crossed into another branch of #4AV and thrombectomy was performed several times, using aspiration catheter. However, coronary blood flow was not restored. So, we performed dilatation with NSE ALPHA 2.5 mm × 13 mm. Final angiogram showed a TIMI 3 flow. The intra-aortic balloon pump was inserted. Immediately antithrombotherapy was started by dual antiplatelet agent (prasugrel, aspirin) with warfarin. Two weeks after PCI, CAG showed good coronary flow. We should not use DCB for such as thrombotic occlusion. Antithrombotic therapy using three drugs was effective in this case.