

1022 ST-elevation myocardial infarction due to LAD proximal lesion with chronic total occlusion of LAD mid lesion.

A 76-year-old man was admitted to the emergency department with a chief complaint of chest pain for an hour. His electrocardiogram showed ST segment elevation in the V2-V6, I and aVL leads and reciprocal ST segment depression in II, III and aVF leads. Emergent CAG revealed complete occlusion of the proximal segment of LAD coronary artery and PCI was performed.

The procedure was performed via left transradial approach using a 6-Fr guiding catheter (Hyperion SPB 3.5, Asahi Intecc). We tried to cross the occluded lesion using Runthrough NS guidewire, however, we could not. Therefore, we used Caravel microcatheter and exchanged the wire to XT-R, thereafter Gaia next 1. Regardless of the back-up force by microcatheter and use of CTO, we could not cross the lesion and the guiding system collapsed

The guiding catheter was engaged and angiography was performed again, which fortunately revealed the recanalization of the occluded lesion. The angiography also revealed TIMI 2 D1 flow and TIMI 0 flow of LAD occluded at just distal to the D1 bifurcation. Therefore, we considered that the culprit lesion was LAD proximal and LAD just distal to the D1 bifurcation lesion was CTO.

A Runthrough NS guidewire was advanced into the D1 and using SASUKE dual lumen catheter Gaia next 2 was advanced to LAD, however, resulted in the subintimal wiring. The Gaia next 2 was extracted and to improve the coronary flow and to increase the guidewire maneuverability, balloon dilatation at LMT to LAD proximal with Emerge 2.5/12 and Lacrosse NSE2.75/13 was performed. Then, using Caravel microcatheter Gaia next 2 was crossed the CTO lesion and advanced to septal branch. The caravel was extracted and the guidewire was exchanged to Sion blue. Thereafter, using SASUKE Sion black was advanced into LAD distal. After pre-dilation with Ryurei 1.25/10 and Ryurei 2.0/20, we confirmed with IVUS that the whole guidewire was in the true lumen. Then Xience Sierra2.5/38 and Xience Sierra3.5/28 was deployed from the distal LAD to the left main trunk and post-dilation with NC TREK 4.0/15 was performed. Final coronary angiography revealed TIMI 3 flow and we finished the procedure.