

How should we manage a case with repeat in-stent occlusion after successful PCI for RCA-CTO?

<sup>1</sup>Tokorozawa Heart Center

Hiroshi Doi<sup>1</sup>, Masanori Taniwaki<sup>1</sup>, Takafumi Inokuchi<sup>1</sup>, Hirosada Yamamoto<sup>1</sup>, Hirotaka Ezaki<sup>1</sup>, Takayuki Miyake<sup>1</sup>, Masami Sakurada<sup>1</sup>

A case was 65-year-old male. He was admitted to our hospital due to exertional angina. His CAG demonstrated stenosis in the proximal RCA and total occlusion from the middle RCA to right posterior descending artery (RPDA). He underwent PCI for RCA with three DES after successful antegrade wiring. Final angiogram showed good stent expansion and sufficient distal flow. One year later, follow-up CAG was performed due to recurrent angina. His angiogram revealed in stent re-occlusion from the proximal RCA to RPDA. He underwent second PCI with drug-eluting balloon (DEB) dilatation after successful antegrade wiring and POBA. Final angiogram showed optimal lumen dilatation and distal flow. Moreover, we changed the anti-platelet agent from Clopidogrel to Prasugrel. One year later after the second PCI, follow-up CAG was performed. Unfortunately, his CAG demonstrated repeat in-stent occlusion from the proximal RCA to RPDA, and right posterolateral branch (RPL) occlusion. He underwent third PCI for RCA occlusion. After successful antegrade wiring using rotation-angiogram technique and knuckle-wire technique, thrombus aspiration was performed because large amount of thrombus was considered to be present in the occluded stents. In fact, several thrombi were extracted. Afterwards, DES was implanted to distal RCA to RPL branch in the form of staged Culotte stenting. Another DES was implanted to mid RCA segment. Moreover, DEB was dilated into the RPDA segment. Finally, an optimal flow into both RPDA and RPL branches was achieved. We would discuss how to manage a case with recurrent in-stent occlusion after successful CTO-PCI.