

1004 Retrograde approach PCI for LAD-CTO, via an ipsilateral intra-septal collateral channel

This is a case report of 69 y.o. female who was admitted to our institute because of heart failure complicated with LAD-CTO. Cardio-pulmonary function was severely impaired (NYHA class III). We gave her low dose of hANP and furosemide. Her symptom recovered immediately, but dyspnea on effort remained. Antero-septal asynergy was revealed by UCG. CAG revealed short length CTO in proximal LAD, and severe and diffuse calcification at the proximal site of the CTO lesion. Good collateral vessels that was connected to distal site of CTO lesion, fed second septal from first septal. We tried to perform PCI for LAD-CTO, via an ipsilateral intra septal collateral channel. Firstly, we tried ante grade approach PCI, but guidewire went into subintima, so we changed to retrograde approach via an ipsilateral intra septal collateral channel. Anchor technique helped the retrograde guide wire cross the CTO site, and externalization was achieved. We delivered OTW balloon across an ipsilateral intra septal collateral channel, and successfully passed the guide wire to distal LAD by CART technique.

Several devices failed to pass the lesion via ante grade route due to severe calcium, but Mogul Thinner finally succeeded by proceeding accompanied with the tip of corsair set via retro grade. When we tried to retrieve the balloon into the guiding catheter after balloon dilatation was performed, the septal muscle of left ventricle was twitched and shrunk by the guidewire. After NC balloon dilatation for CTO site and calcificated lesion, septal shrink was not avoided fatefully. Throughout all our efforts, we could implant stents for culprit lesions. After successful PCI for LAD-CTO, her cardiac symptom was improved to NYHA class I .

Retrograde approach PCI for LAD-CTO via an ipsilateral intra-septal collateral channel needs extra back up force, and that caused unexpected complication occasionally. You should be careful when planning the strategy for CTO-PCI using ipsilateral collateral channels.