A case of severe calcified CTO complicated by septal perforation during ipsilateral channel tracking.

Case: 80’s Male diagnosed old anterior myocardial infarction. He had undergone stent implantation for LCX stenosis and tried PCI for LAD–CTO, which had been failed in 2013. He was admitted to our hospital due to heart failure and ventricular tachycardia. His ejection fraction was 35% by echocardiogram. We planned to PCI for LAD–CTO and started retrograde approach first because the CTO exit bifurcated a diagonal branch. We tried a few septal channels and RV branch to apex using SUOH03 and XT–R with Caravel, but couldn’t pass the channels. Antegrade wiring tried and Miracle 12g could penetrated the CTO entry. We used parallel wire technique with Gaia Third, which couldn’t succeed in passing the CTO due to calcification. Then, ipsilateral septal channel was used and Sion passed the channel to diagonal branch. When we tried to advance Corsair Pro 150, it deviated from the channel at the bottom of connection and septal perforation occurred. The Corsair kept in the septal channel and antegrade wiring with Conquest pro was continued. Finally, the wire could penetrate the distal cap with retrograde wire landmark and pass the CTO. We achieved hemostasis of septal branch with coil embolization. IVUS finding showed intraplaque and severe calcification to the diagonal branch side. We implanted two drug-eluting stents to the LAD and diagonal branch. We needed to consider retrograde channel selection in this case with severe calcified CTO and to manage ipsilateral channel perforation by Corsair.