

## 1062 A pitfall of IVUS-guided parallel wire technique in the case of tortuous LCx CTO

A 70-year-old woman with diabetes and abnormal electrocardiogram underwent coronary angiogram (CAG). CAG revealed three-vessel disease including left circumflex artery (LCx) chronic total occlusion (CTO). She received staged percutaneous coronary intervention (PCI) because exercise stress testing was positive and she refused coronary artery bypass grafting. We attempted PCI for the tortuous LCx CTO after PCIs of left anterior descending artery (LAD) and right coronary artery (RCA) lesions. 7-Fr Glide sheaths were inserted into bilateral radial arteries and 7-Fr EBU3.5 and 7Fr-AL1 guiding catheter were engaged into left coronary artery (LCA) and RCA, respectively. Antegrade wire escalation was performed, but the guidewire (GW) went into subintima. We tried to cross a GW to the retrograde channels via RCA and diagonal branches, but failed. We went back to antegrade approach and performed intravascular ultrasound (IVUS)-guided parallel wire technique (PWT). Because the LCx CTO was very tortuous, the tip of the second wire (Gaia second) needed to be strongly bended. We successfully inserted the second wire into the intra plaque with IVUS guidance and advanced the wire to the distal lumen. We advanced the Corsair microcatheter and change the wire to a floppy one. After that, we checked IVUS. Regrettably, the wire went into subintimal lumen from the distal CTO and large hematoma was created. We could not recross a wire to the intimal lumen and the procedure failed. Half a year later, we performed re-attempt of PCI for the LCx CTO with 8Fr EBU guiding catheter via femoral artery. Retrograde procedure failed once again, and IVUS-guided PWT was performed. We could insert the second wire (Gaia next2) into the intra plaque and change the wire to a floppy one without advancing it to the distal lumen. Eventually, the procedure successfully ended. IVUS-guided PWT is useful even in tortuous CTO lesion like this case. In this procedure, a second wire entering intima must not be advanced to the distal true lumen because the stiff wire potentially went into subintima at the distal of CTO. This pitfall is simple and natural, but very important as shown in this case.