

**Case Summary.** We succeeded in performing re-vascularization for severe 3 vessel disease involving LM bifurcation and LAD-CTO.

During the 2<sup>nd</sup> procedure, GW selection was a key of success.

Change of strategy from penetration to slip through the calcification gap was necessary for LAD-CTO in this case.

#### **TCTAP C-099**

#### **Antegrade Parallel Wire Technique to Bail out of Failed Retrograde Procedure Using Bi-Directional 5 Fr Systems**

Hidetsugu Sakai<sup>1</sup>

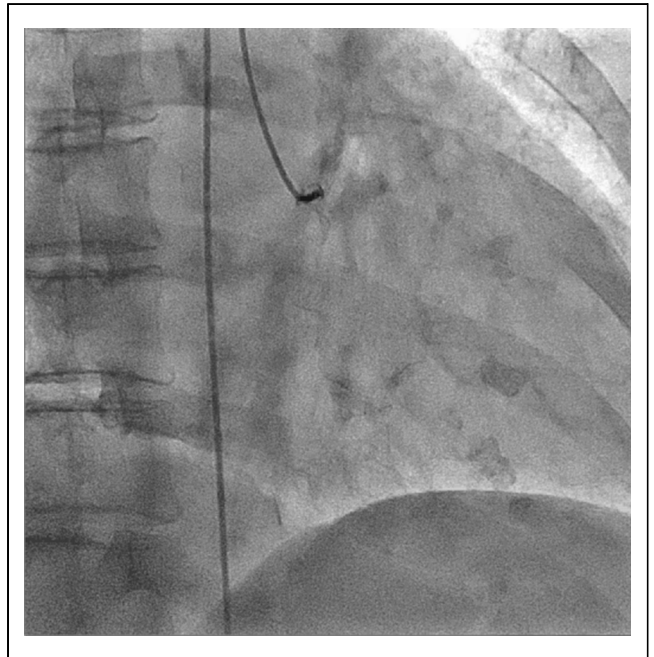
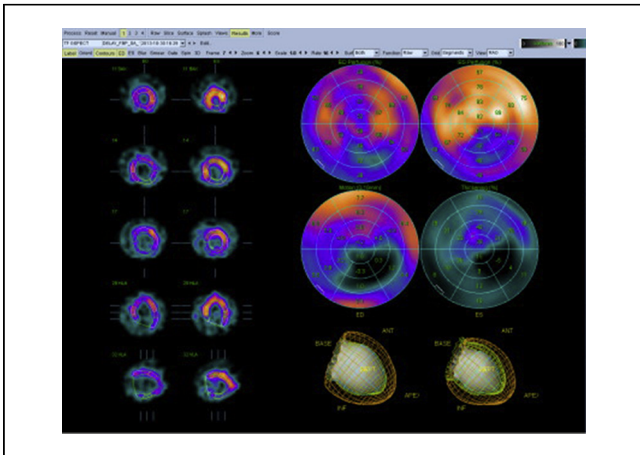
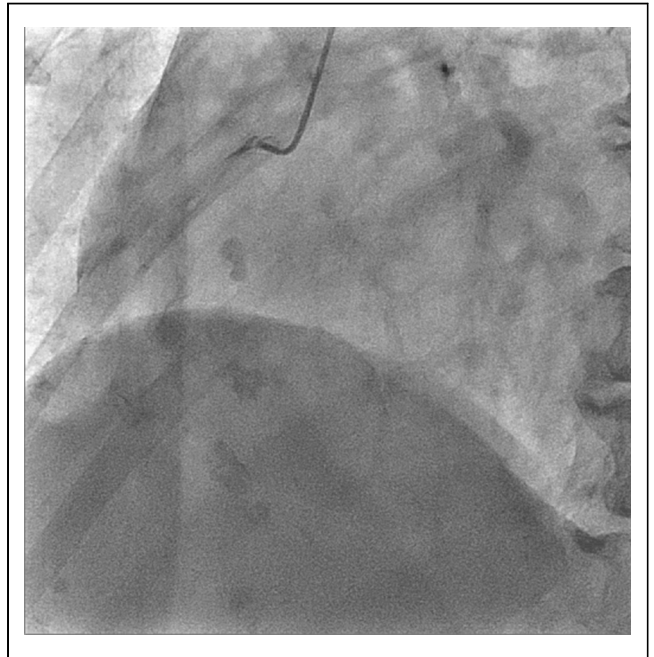
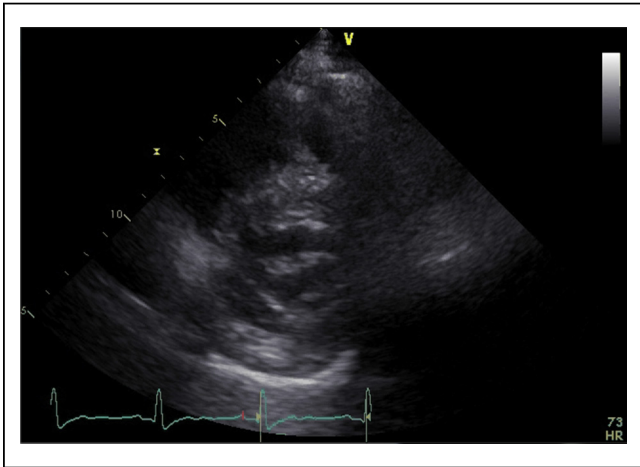
<sup>1</sup>Kushiro City General Hospital, Japan

#### **[CLINICAL INFORMATION]**

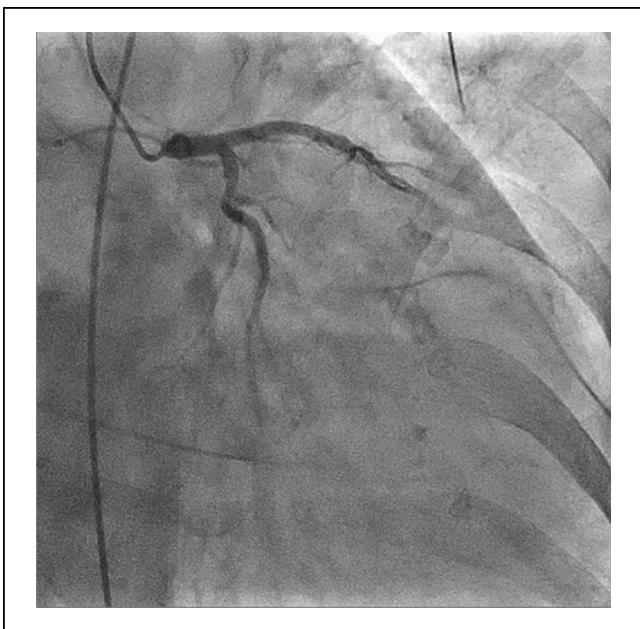
**Patient initials or identifier number.** 84-03044-4

**Relevant clinical history and physical exam.** A 78 year-old lady who took antihypertensive agents was admitted due to syncope. All of her vital signs including blood pressure and pulse rate were normal, and electro cardiographic monitoring did not show any abnormal findings. Therefore, we thought that she suffered from neutrally mediated syncope. Although she had never complained of chest pain, we performed echocardiography because she and her family requested us to perform cardiac examination.

**Relevant test results prior to catheterization.** Echocardiography showed reduced wall motion of inferior territory, and left ventricular ejection fraction was 52%. Next, we performed scintigraphic study, and stress perfusion images revealed reversible ischemia of inferior territory.



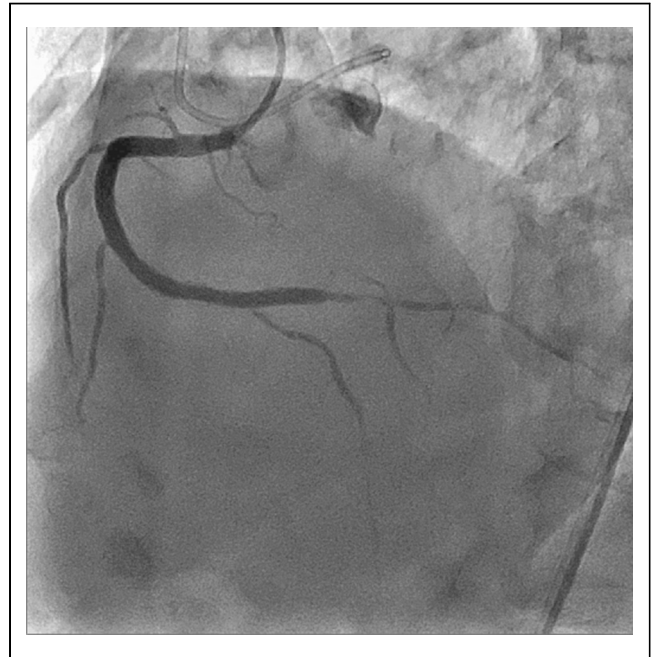
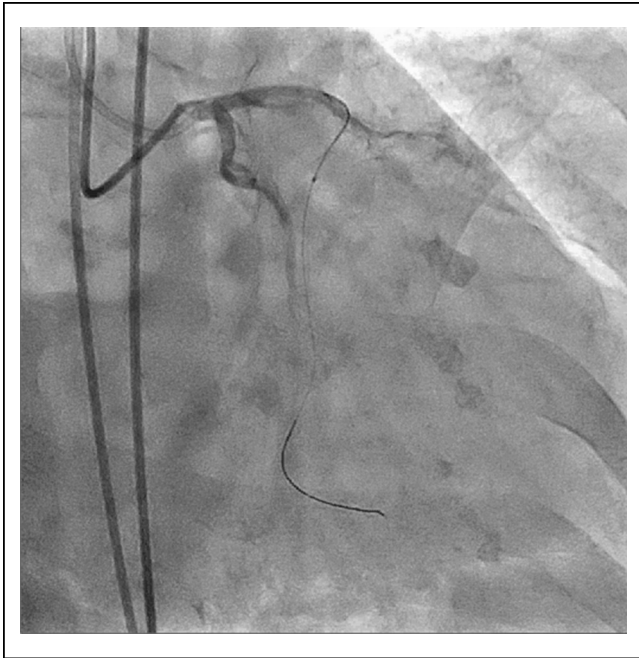
**Relevant catheterization findings.** Left coronary angiography (CAG) showed only a moderate stenosis of proximal segment of left anterior descending branch and rich collaterals toward distal right coronary artery (RCA). Right CAG revealed total occlusion of middle RCA.



**[INTERVENTIONAL MANAGEMENT]**

**Procedural step.** Both coronary arteries were engaged with 5 Fr IL4.0 Heart rail II guiding catheters (Terumo) via right femoral artery. At first, we tried antegrade procedure. A Conquest Pro guidewire (Asahi) with a Finecross GT microcatheter (Terumo) was advanced but it could not penetrate the entry fibrous cap of the lesion. Next, we performed retrograde procedure. A Fielder FC guidewire (Asahi) with another Finecross GT microcatheter was advanced. The guidewire successfully negotiated a narrow and tortuous septal channel and reached posterior descending branch. But, it went wrong toward apex not toward the lesion in spite of our maximal efforts. Then, we again tried antegrade procedure. The antegrade 5 Fr guiding catheter was deeply inserted to achieve strong back up force and the previous Conquest Pro guidewire was advanced. Unfortunately, it went into sub-intimal space. Therefore, we decided to perform parallel wire technique using a Conquest Pro 12 guidewire (Asahi). Careful manipulation enabled it to cross the lesion. We advanced a 2.0-15 mm Kamui

balloon catheter (Asahi) and dilated whole length of the lesion. After three Nobori stents (3.0-28 mm + 3.5-28 mm + 3.5-28 mm) (Terumo) were placed, we performed postdilatation using a 3.75-13 mm Kunai balloon catheter (Asahi). Final angiography revealed that the lesion was well dilated without any complications.



**Case Summary.** It is well known that bi-directional procedure using intra-coronary collateral channels is of much effect to treat chronic total occlusions. In those situations, thick guiding catheters are widely used. But 5 Fr Ikari Left guiding catheters have good maneuverability and can be used to engage not only left but also right coronary arteries from whichever approach is selected. Deep engagement of 5 Fr guiding catheter is safe and can be easily performed, and it enables us to achieve strong back up force and perform various techniques including parallel wire technique.

**TCTAP C-100**  
**Successful Retrograde Externalization of a Left Anterior Descending Artery Chronic Total Occlusion with Landmark of a Previous Placed Diagonal Artery Stent**

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**[CLINICAL INFORMATION]**

**Patient initials or identifier number.** 98982777

**Relevant clinical history and physical exam.** A 70-year-old male had unstable angina pectoris. Coronary angiography revealed total occlusion in ostial left anterior descending artery(LAD), 90% stenosis in left circumflex artery(LCX), and 99% stenosis right coronary artery(RCA). The patient had undergone emergent coronary artery bypass graft(CABG); left internal thoracic artery(LITA) to the LAD, saphena vein graft(SVG) to the LCX, and SVG to the RCA. In the first post-CABG year, he was admitted to our hospital because of exertional chest pain.

