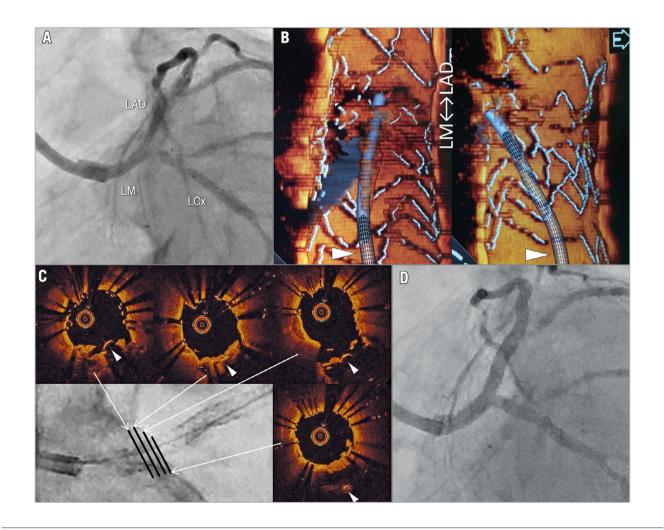
## Unsuccessful confirmation of rewiring position with threedimensional optical coherence tomography caused by thrombus formation on jailed struts



Fumiaki Nakao\*, MD, PhD

Department of Cardiology, Yamaguchi Grand Medical Center, Hofu, Japan This paper also includes supplementary data published online at: www.asiaintervention.org



\*Corresponding author: Department of Cardiology, Yamaguchi Grand Medical Center, 77 Ohsaki, Hofu, Yamaguchi 747-8511, Japan. E-mail: nakao-ymghp@umin.ac.jp

An 80-year-old man had culotte stenting performed for a left main (LM) true bifurcation lesion (Panel A). He underwent implantation of a first stent on the LM-left circumflex artery (LCx) with an Ultimaster<sup>®</sup> 2.5×18 mm (Terumo, Tokyo, Japan). After opening the jailed struts, he underwent a second stent implantation on the LM-left anterior descending artery (LAD) with an Ultimaster 3.0×24 mm. After rewiring to the LCx, using three-dimensional optical coherence tomography (3D-OCT) with the OPTIS<sup>TM</sup> Metallic Stent Optimization Software<sup>TM</sup> (St. Jude Medical, St. Paul, MN, USA), no links connecting to a carina were confirmed, but the guidewire recrossed to the LCx through some tissue on the LCx ostium, and the distal cell rewiring could not be confirmed (Panel B). According to two-dimensional OCT (2D-OCT), the unsuccessful confirmation with 3D-OCT was caused by thrombus formation on the jailed struts, and the guidewire recrossed through the distal cell (Panel C, Moving image 1). After final kissing balloon dilation, coronary angiography (Panel D), 2D-OCT (Moving image 2), and 3D-OCT (Supplementary Figure 1) showed a good result.

3D-OCT is useful for bifurcation PCI, but confirmation by 2D-OCT is also required.

## **Conflict of interest statement**

The author has no conflicts of interest to declare.

## Supplementary data

Supplementary Figure 1. Final 3D-OCT.

**Moving image 1.** 2D-OCT from LAD to LM, after second stent implantation followed by rewiring to LCx.

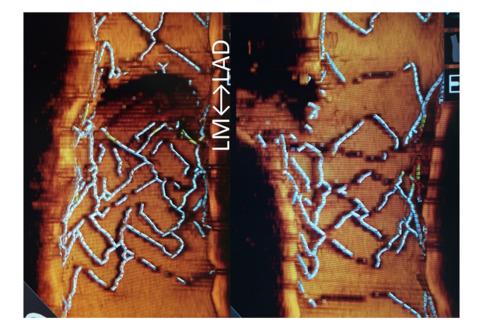
Moving image 2. Final 2D-OCT from LAD to LM.

The supplementary data are published online at: www.asiaintervention.org



Supplementary data

**Supplementary Figure 1.** Final 3D-OCT.



LAD: left anterior descending artery; LM: left main coherence tomography