Case Summary. CABG was utilized to treat LM + 3VD, but may develop graft failure and native LM occlusion later on. LM occlusion can be treated with PCI. Guiding catheter coaxial alignment is sometimes more important than adding extra-support guiding catheter.

TCTAP C-053
Reverse Wiring Could Be Very Difficult in the Presence of Critical Lesions Both Before and After the Targeted Calcified True Bifurcation Lesion
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[CLINICAL INFORMATION]
Patient initials or identifier number. H.R.L.

Relevant clinical history and physical exam.
- Her RL, 1489XXXF, 83 Y/M
- Admitted on 2014/10/18 due to chest pain
  - Dx as of NSTEMI
- Past history
  - Bilateral carotid stenoses, no stenting was done
  - CKD, stage IV-V
- Elective CAG on 2014/10/20

Relevant test results prior to catheterization.
- 2014/10/18
  - WBC15000 (89/7), Hb 11.7
  - CK/MB951/32
  - Troponin-I12
- Chol 150, LDL 88, TG 67
- CR3.6

Echo:
- LV 48/38mm,
- Dista l2/3 IVS, inf and distal 2/3 inferolateral akinetic; others hypokinetic
- EF27%
- AR+, MR+

Relevant catheterization findings.
- CAD, TVD, with NSTEMI
- No CABG option
- PCI, RCA first
  - The risk of no flow expected high due to large plaque burden
  - Patient would die if no flow occurs
- PCI, LCA first
  - Technically challenging
  - May need emergent bypass if anything goes wrong
  - If D1 lost a tragedy
[INTERVENTIONAL MANAGEMENT]

Procedural step. Because the procedure was of high risk and systemic BP only 100/50 mmHg at the beginning of procedure, the intervention time should be limited. Therefore, we decided to go LCA first and intended to do reverse wiring of D1 and culotte stenting for this true bifurcation lesion. However, after POBA of the critical LAD-M and -D lesions, the first and second attempts of reverse wiring with Fielder FC and Sion failed and were complicated by systemic hypotension. We were forced to do LAD-M-D stenting first. The third reverse wiring attempt with another wire also failed and was complicated with proximal D1 dissection. Finally the 4th attempt with another FC wire succeeded in wiring of the D1. After balloon predilatation, culotte stenting of the bifurcation lesion was done elegantly and with very good final flow and D1 perfectly saved. Patient was discharged from hospital two days after procedure, waiting to be treated for RCA-P-M critical lesion with distal protection technique.
Case Summary.
- Wise treatment planning is needed before complex bifurcation lesion PCI
- Reverse wiring could be extremely difficult in calcified true bifurcation lesion with tight stenoses both proximally and distally located
- Keeping a very important side branch alive is invaluable in high risk bifurcation lesion PCI