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Conclusions. The intimal dissection and acute thrombus formation may be seen during percutaneous coronary intervention. The coronary intima may be injured by balloon angioplasty and stent deployment, which was very common intervention in this era. We share this special case as combined intravascular imaging usage with dedicate problem-solving strategy, which can help us to differential the no-reflow phenomenon between dissection or thrombosis, even the clinical condition is life-threatening.

TCTAP C-100
CASE WITHDRAWN

TCTAP C-101
Lost and Found
David Yong,1 Beni Isman Rusani,1 Shaiful Azmi Yahaya1 National Heart Institute, Malaysia

CLINICAL INFORMATION
Patient Initials or Identifier Number. MNMK
Relevant Clinical History and Physical Exam. Presenting a case of an 84-year-old gentleman with background history of hypertension and recent COVID-19 infection. Following discharge from COVID-19 pneumonia, he presented to our centre on 7/7/2021 for persistent chest pain. Clinical examination showed stable vital signs: BP 124/63 mmHg with heart rate of 72 beats per minute. There were no clinical signs of heart failure. He was diagnosed with acute coronary syndrome and initiated on treatment.

Relevant Test Results Prior to Catheterization. ECG done on day 1 of admission showed biphasic T waves indicative of Wellens Syndrome. Repeated ECG on day 2 of admission showed ST depression over v2-v6. hsTrop- T was marginally elevated at 26 pg/ml. Echocardiogram showed normal ejection fraction 55% with no regional wall motion abnormality and mild aortic regurgitation.

Relevant Catheterization Findings. Diagnostic angiogram of the left system showed severe disease at the proximal left circumflex, proximal obtuse marginatum 1 and proximal left anterior descending artery. The right coronary artery was however anomalous and does not originate from the right coronary cusp. While attempting to locate the right coronary artery which we suspect originate from the left coronary cusp, the diagnostic catheter was engaged deeply into the left anterior descending causing dissection and no flow.
INTERVENTIONAL MANAGEMENT

Procedural Step. Immediately after the complication occurred, the patient developed hypotension due to cardiogenic shock. Intra-aortic balloon pump was inserted via left femoral access and vasopressors were initiated for circulatory support. Left main coronary artery was engaged with EBU 3.5. Initial attempt to wire the left anterior descending (LAD) artery with a Runthrough Floppy wire was unsuccessful and entered the diagonal. A second wire, Sion Blue was used as a parallel wire in attempt to wire the LAD but was unsuccessful. A FIELDER XT-A was used to wire the LAD successfully into the distal true lumen. A semi-compliant 2.5/15 balloon was used to dilate the dissection flap area at nominal pressure. Post balloon dilation, flow down the LAD was re-established. A DES 3.5/28 was deployed at the proximal LAD. Post dilation with non-compliant balloon was performed up to 18 atm for stent optimisation. Post-procedure, patient hemodynamics improved, and we were able to off the balloon pump and vasopressor support.

Subsequently, a MSCT coronary was performed confirming the right coronary artery originating from the left coronary cusp. However, it was small and non-dominant, thus a decision for optimal medical therapy was taken and no further invasive coronary intervention was performed for this patient.
Conclusions. Iatrogenic coronary artery dissection during catheterization is one of the major complications seen during such procedures. In our case, the dissection flap has closed the proximal LAD true lumen causing no flow and cardiogenic shock. Adequate cardiac circulatory support should be initiated immediately as was done in our case with vasopressors and intra-aortic balloon pump. Wiring the LAD with soft wire was unsuccessful likely due to the slit like opening of the true lumen caused by the dissection flap. Fielder XT-A designed with a tapered tip and polymer coating was able to navigate the slit opening and cross into the distal true lumen.

INTERVENTIONAL MANAGEMENT
Procedural Step. PCI of the RCA was done via right radial approach. Pre-dilatation of the ostioproximal RCA was done using a 4.0 x 15 mm scoring balloon at maximum of 16 atm. A 4.0 x 18 mm Zotarolimus-eluting stent was positioned at the aorto-ostial to proximal RCA and deployed at 20 atm. Post-dilatation was done using a 4.5 x 15 mm non-compliant (NC) balloon at maximum of 18 atm. There was difficulty in removing the fully deflated NC balloon with resistance encountered at the proximal stent edge (Image 2A), hence another inflation at 18 atm was done (Image 2B). However, the balloon failed to deflate totally, occluding flow. Despite replacing the indeflator and using pure saline, the balloon remained undeflatable. The patient started having chest pains with new onset ST-segment elevation. Multiple attempts to puncture the balloon using the stiff end of the guidewire were unsuccessful. The balloon was then successfully deflated without causing any form of damage after intentionally bursting it by inflating to ultra-high pressure (Image 3A). The balloon was deformed hence there was difficulty pulling it back inside the catheter (Image 3B). The whole system was redirected and advanced into the abdominal aorta. A 6F One Snare system (Merit Medical Systems, Inc., Utah, USA) inserted via femoral approach was used to secure the distal edge of the balloon in order to straighten it by providing counter traction (Image 4). The whole system was then safely removed via the radial sheath.

CLINICAL INFORMATION
Patient Initials or Identifier Number. Z.M.A.
Relevant Clinical History and Physical Exam. We present a 56-year-old woman with a known case of hypertensive cardiovascular disease, type 2 diabetes mellitus and dyslipidemia. She was having intermittent episodes of angina on exertion and diagnosed with chronic coronary syndrome. She was started on anti-anginal regimen and advised to undergo additional tests.

Relevant Test Results Prior to Catheterization. On further work-up, 12-lead electrocardiogram showed non-specific ST-T wave changes and 2D echocardiogram showed a preserved left ventricular systolic function but with note of segmental wall motion abnormality suggestive of multi-vessel coronary artery disease. There was persistence of anginal symptoms despite optimal medical therapy hence she was advised to undergo coronary angiography.

Relevant Catheterization Findings. Diagnostic coronary angiogram showed moderate stenosis of the ostial left circumflex artery (Image 1A), severe stenosis of the mid and distal left anterior descending artery (Image 1B), and severe stenosis of the ostioproximal right coronary artery (RCA) and total occlusion of the posterior left ventricular artery (Image 1C). Plan was to do a staged percutaneous coronary intervention (PCI) starting with the right coronary artery.