

90. Wrong Turn With a Dead End

Kogulakrishnan Kaniappan, Wan Faizal Wan Rahimi, Datuk Ahmad Khairuddin, National Heart Institute (IJN), Kuala Lumpur, Malaysia

Body

Background: 56 years old gentleman with history of Inferior Myocardial Infarction 2 years ago and underwent Primary PCI to Anomalous RCA , presented with recurrent Inferior Myocardial Infarction. This case aimed to illustrate the challenges and technical difficulty of managing a STEMI in an anomalous vessel

Case: 56 years old gentleman with underlying :

- 1) Coronary Artery Disease – history of Primary PCI to RCA in 2018 for Inferior MI in Anomalous RCA
- 2) Diabetes Mellitus
- 3) Hypertension

Presented with sudden onset left sided chest pain associated with dyspnea.

On examination , he was restless and mildly tachypnoeic.

Afebrile with documented BP : 150/100mmg Hg and pulse of 100bpm. CVS examination showed dual rhythm, no murmur and lungs were clear.

ECG in ED showed ST elevation in leads II,III, aVF with reciprocal change in lead I, aVL. Diagnosis of Acute Inferior Myocardial Infarction , Killip 1 was made and catheterization lab activated for a Primary PCI

Angiogram: Right femoral approach used. Angiographic images taken using diagnostic JL 4.0 Fr catheters for left coronary system. Difficulty to engage the right coronary artery using JR 3.5, MPA-1 catheters. Finally succeeded to engage the right coronary ostia using EBU 3.5,6 Fr

Findings:

LM : normal

LAD : mild proximal disease

LCX : moderate mid-segment disease

RCA : anomalous origin from left coronary sinus. Noted total occlusion from the distal segment of previous proximal RCA stent

Proceeded with PCI to Right Coronary Artery :

EBU 3.5, 6 Fr used to engage the Right coronary artery ostia. Runthrough floppy wire able to cross the lesion and wired down the posterolateral branch (RPL) .

SION BLUE wire crossed the lesion and wired down into posterior descending (RPDA) branch.

Despite 2 wires distally, still noted poor support of guide catheter due to poor engagement (due to anomalous origin of the artery).

Thrombus aspiration attempted twice using Thrombuster II catheter but no thrombus aspirated.

Therefore, we decided to use guide extension, GUIDEPLUS II, 6FR for better support. We are now able to predilate the tightest segment at distal part of proximal stent upto distal stent

using first RYUREI2.0 x 15mm at 10 to 12 atmospheres. Then further predilation done using NC TREK2.5 x 15mm at 12 to 18 Atmospheres.

At this point , noted reperfusion arrhythmias with bradycardia, which responded well with IV Atropine 0.5mg given stat.

Distal flow now improved. Drug coated balloon - SEQUENCE PLEASE NEO 2.5 x40mm was deployed at the previous stent area at 6 atmosphere for 1 minute.

Good final results with TIMI III flow established.

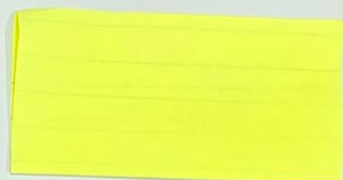
Patient was hemodynamically stable with nil of chest pain upon completion of procedure

Discussion:

1\ This case aims to illustrate the technical difficulties and challenges of Percutaneous Coronary Intervention for STEMI in the background of an anomalous vessel anatomy.

2\ Proper planning of procedure, anticipation of technical difficulties and correct selection of equipments during procedure can facilitate a safe and successful outcome even in such challenging acute myocardial infarction (AMI) cases

95 . sinus rhythm.....normal P axis, V-rate 50- 99
 Probable left atrial enlargement.....P >50mS, <-0.10mV V1
 FR 179 . Inferoposterior infarct, acute (RCA).....ST>.1 inf, <- .1 ant
 QRSD 100 . Anterolateral infarct, age indeterminate.....Q >35mS, flat/neg T, V3-V6,I,aVL
 QT 357 . Probable RV involvement, suggest recording right precordial leads
 QTc 449 . Baseline wander in lead(s) II,aVF,V1,V2,V3,V4



--AXIS--

P 48
 QRS 14
 T 77

- ABNORMAL ECG -
 >>> Acute MI <<<

Unconfirmed Diagnosis

12 Lead; Standard Placement

