14th AICT

ASIAN INTERVENTIONAL CARDIOVASCULAR THERAPEUTICS

THE OFFICIAL CONGRESS OF APSIC

STENT TRAPPED IN AORTIC SINUS AND LEFT MAIN CORONARY ARTERY

Conflicts of Interest

Speaker's name : Anupam, BHAMBHANI, Bangalore

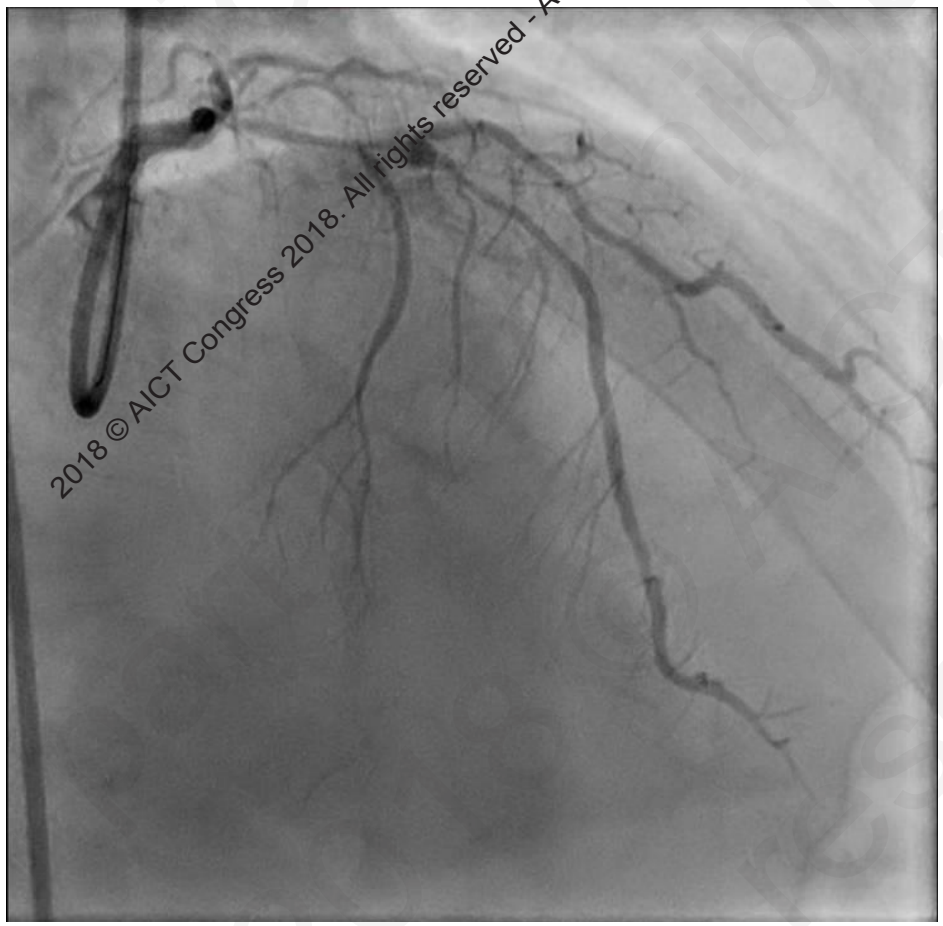
- ☑ I do not have any potential conflict of interest

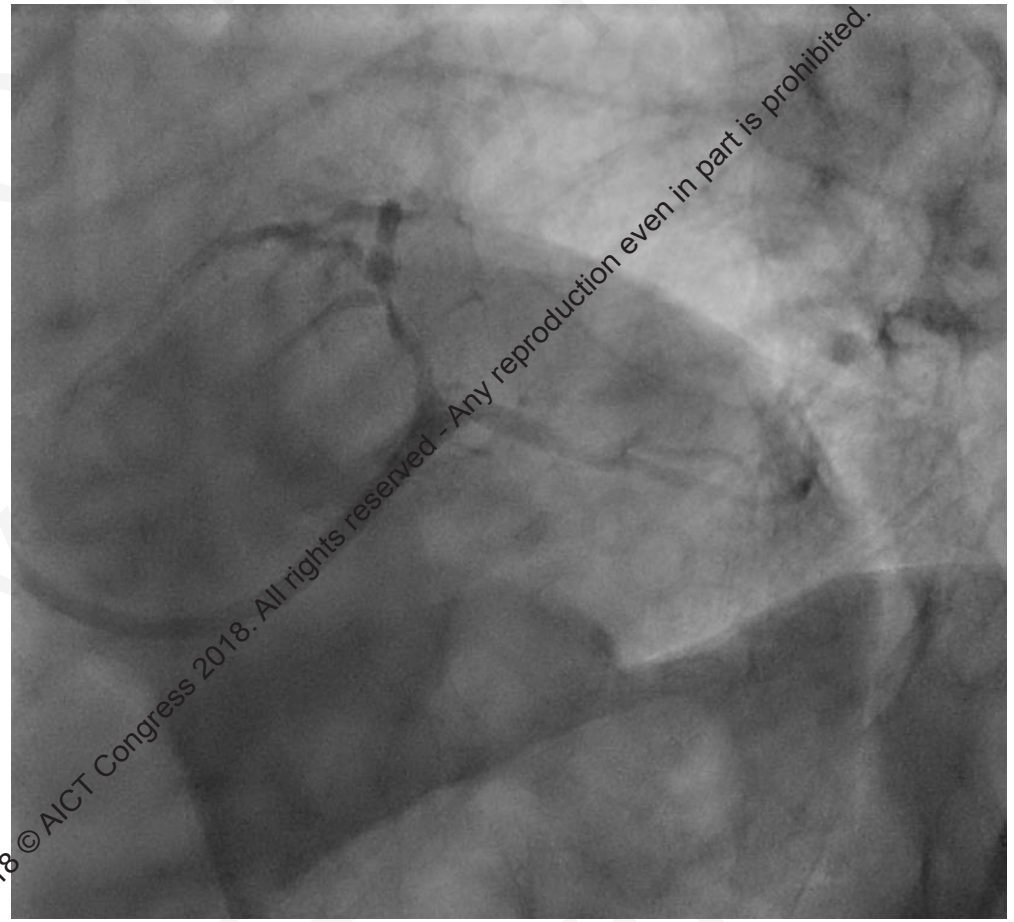
2018 © AICT Congress 2018. All rights reserved - Any reproduction even in part is prohibited.

CLINICAL PRESENTATION

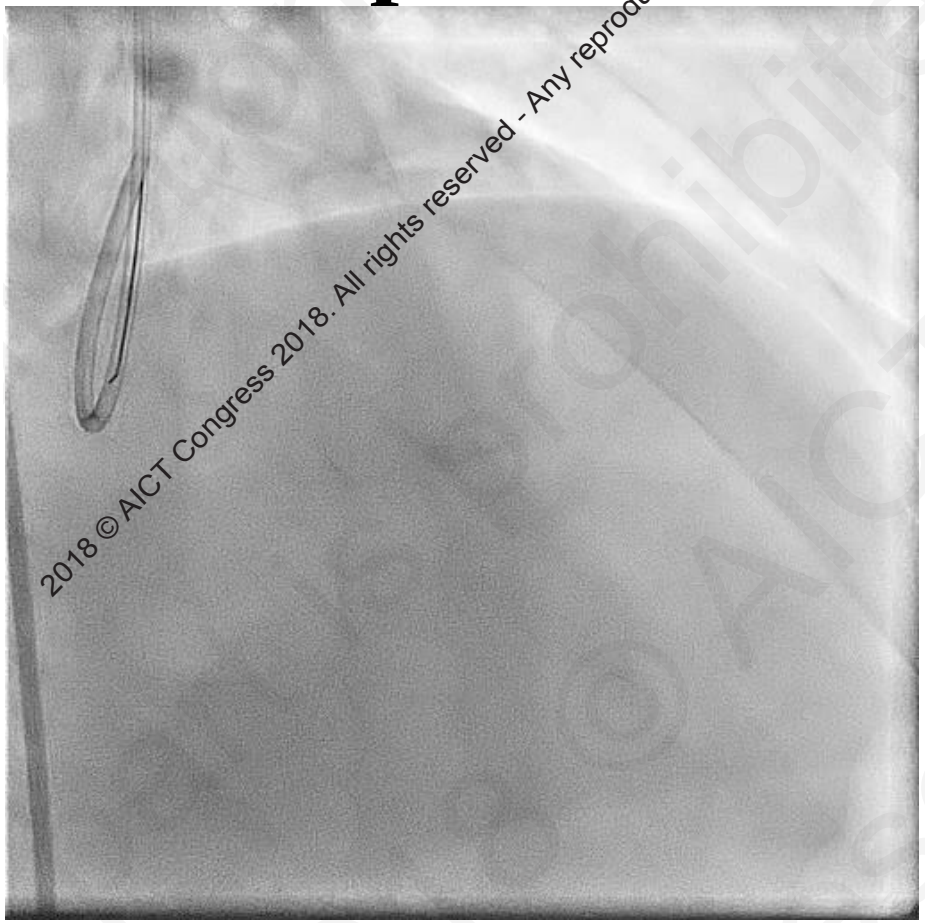
- A 56-year old gentleman, presented with angina on exertion CCS class II for 1 month
- Modifiable CVRF: none (normotensive, non-diabetic)
- ECG: old IWMI
- Echo: all inferior and infero-lateral segments were akinetic, LVEF 48%
- Coronary angiogram:
  - RCA: diffusely diseased up to PDA and PLV and not graftable
  - LAD: multiple significant lesions in proximal, mid and distal segments
  - LCX: non-dominant, no significant stenoses.

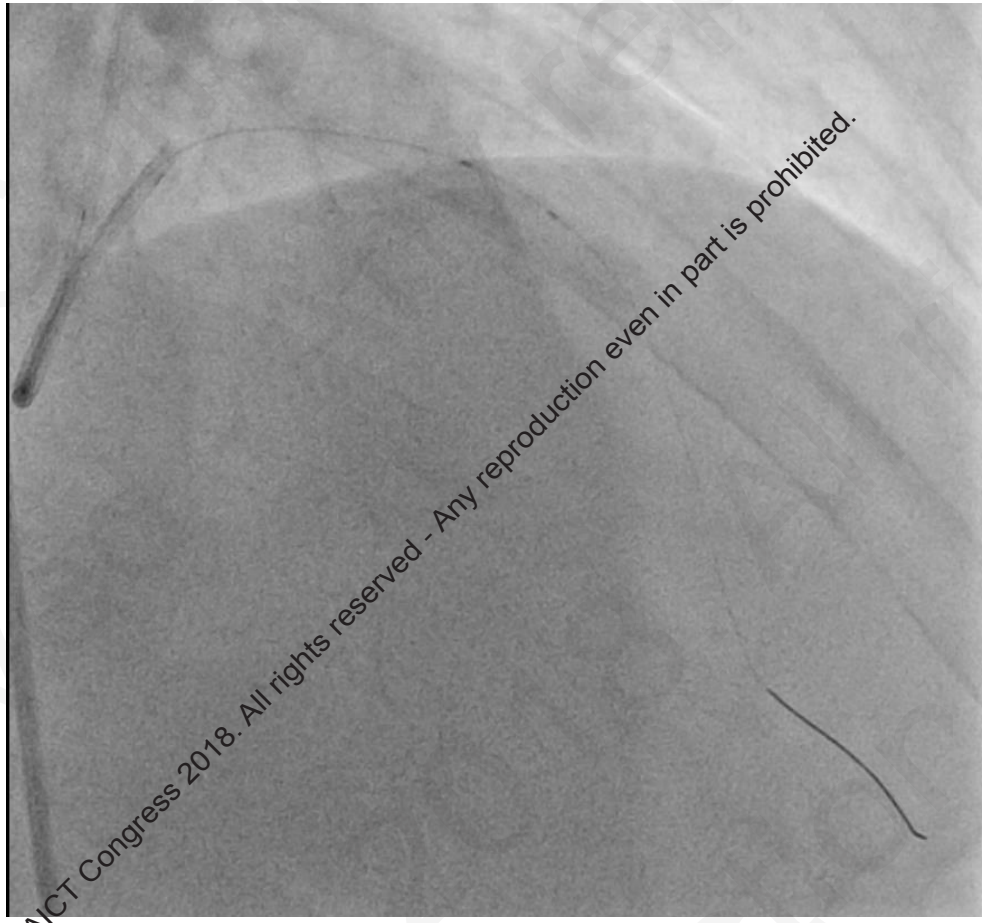
Baseline LCA angiogram (PA-cranial and LAO caudal views): long segment LAD disease without angiographically obvious calcium



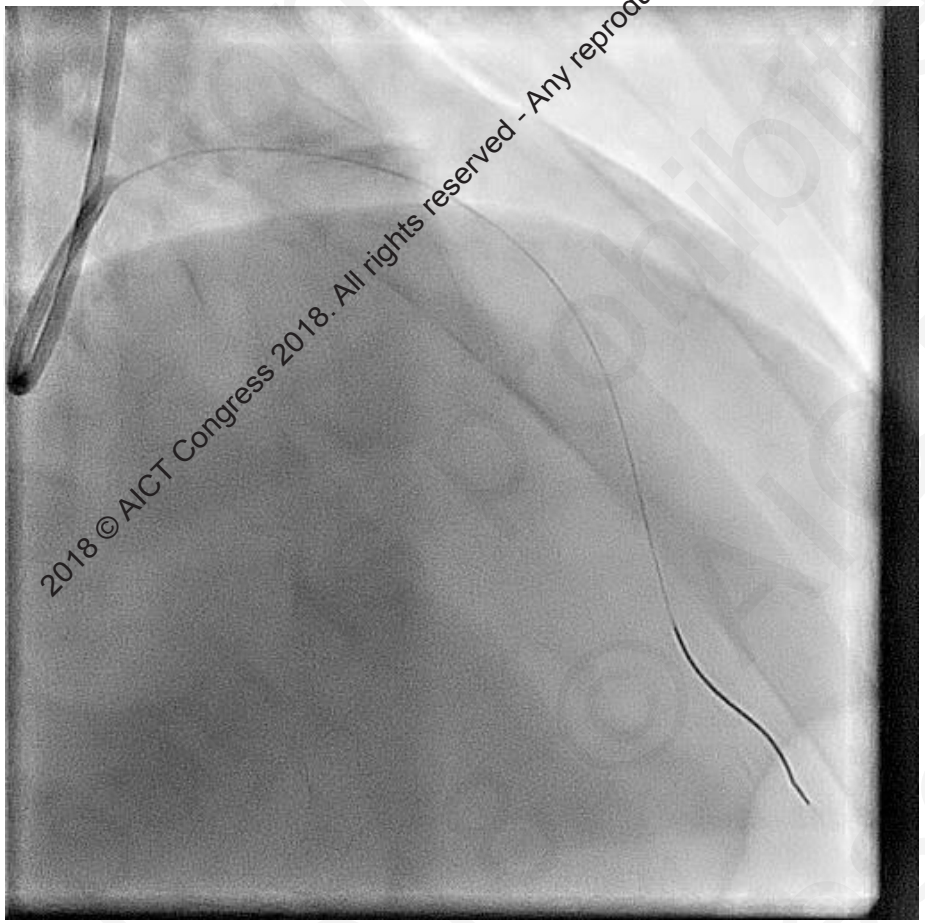


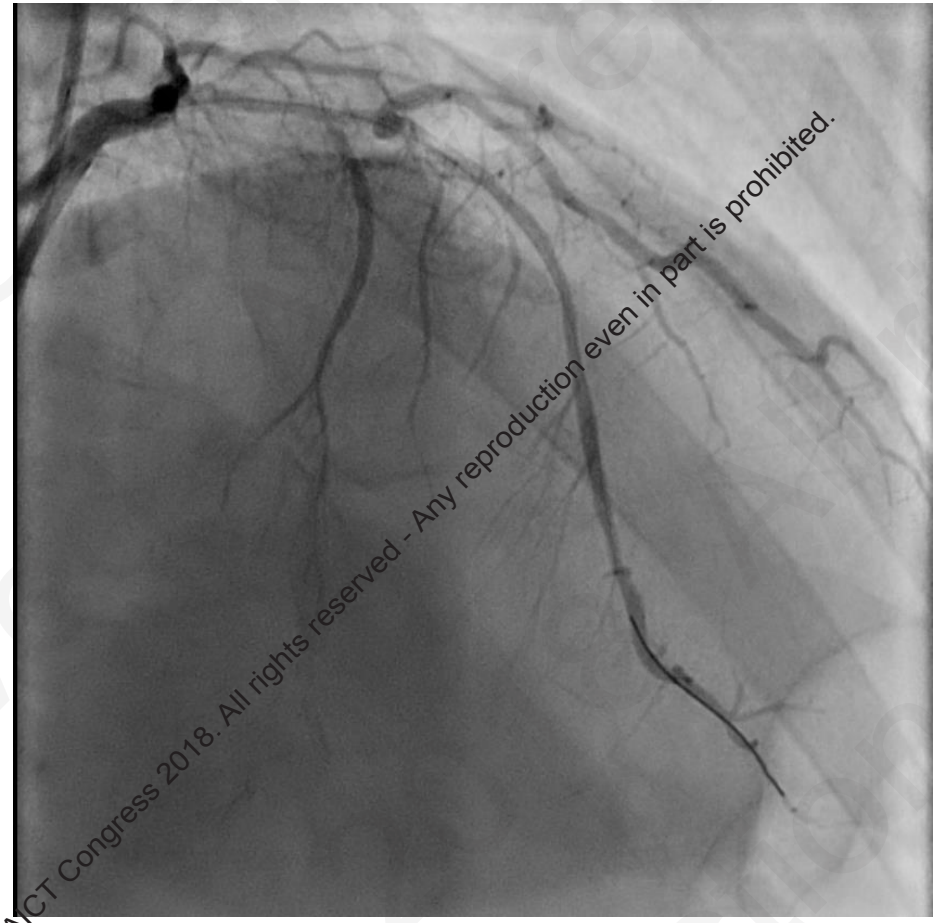
Serial pre-dilatations were done throughout the lesion length using 2x12mm and 2.5x15mm semi-compliant balloons



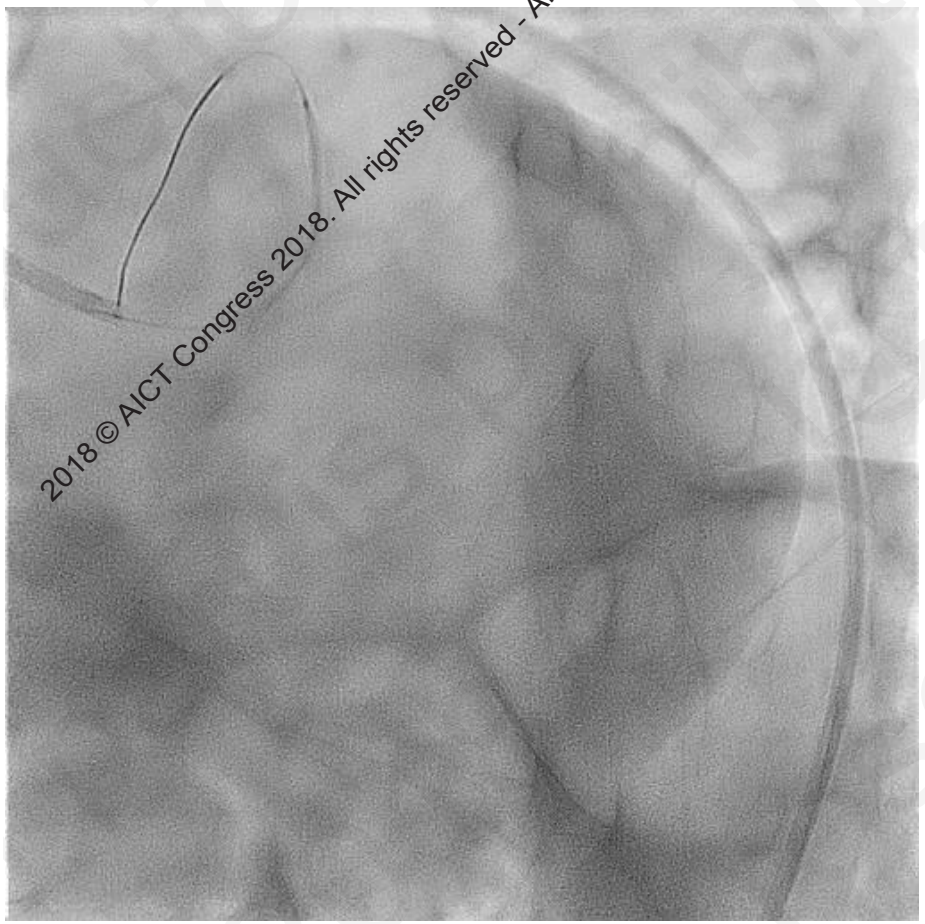


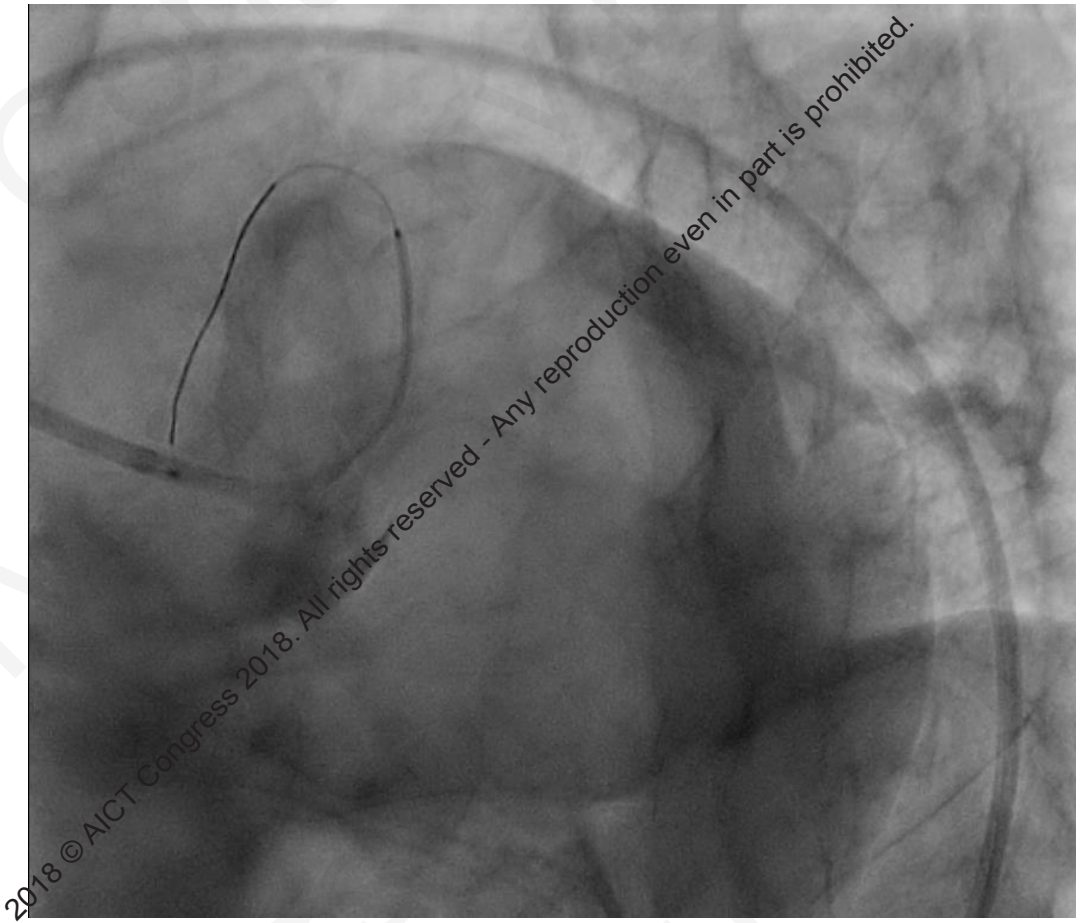
Non-flow limiting dissections seen after pre-dilatations



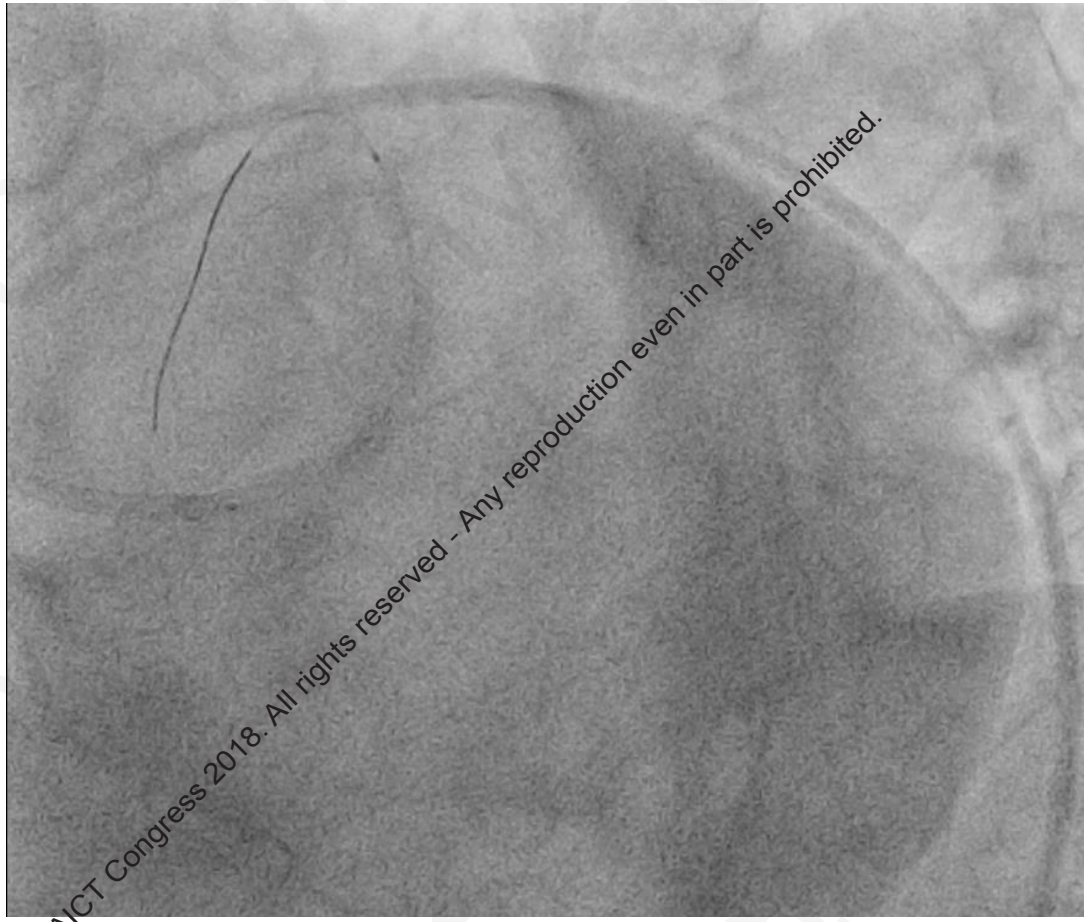


A 2.75x48 mm SES was being advanced toward stenosis, when it got trapped in Aortic sinus-LMCA-LAD; neither advancing nor retracting, despite maneuvering of catheter into deeply engaged position

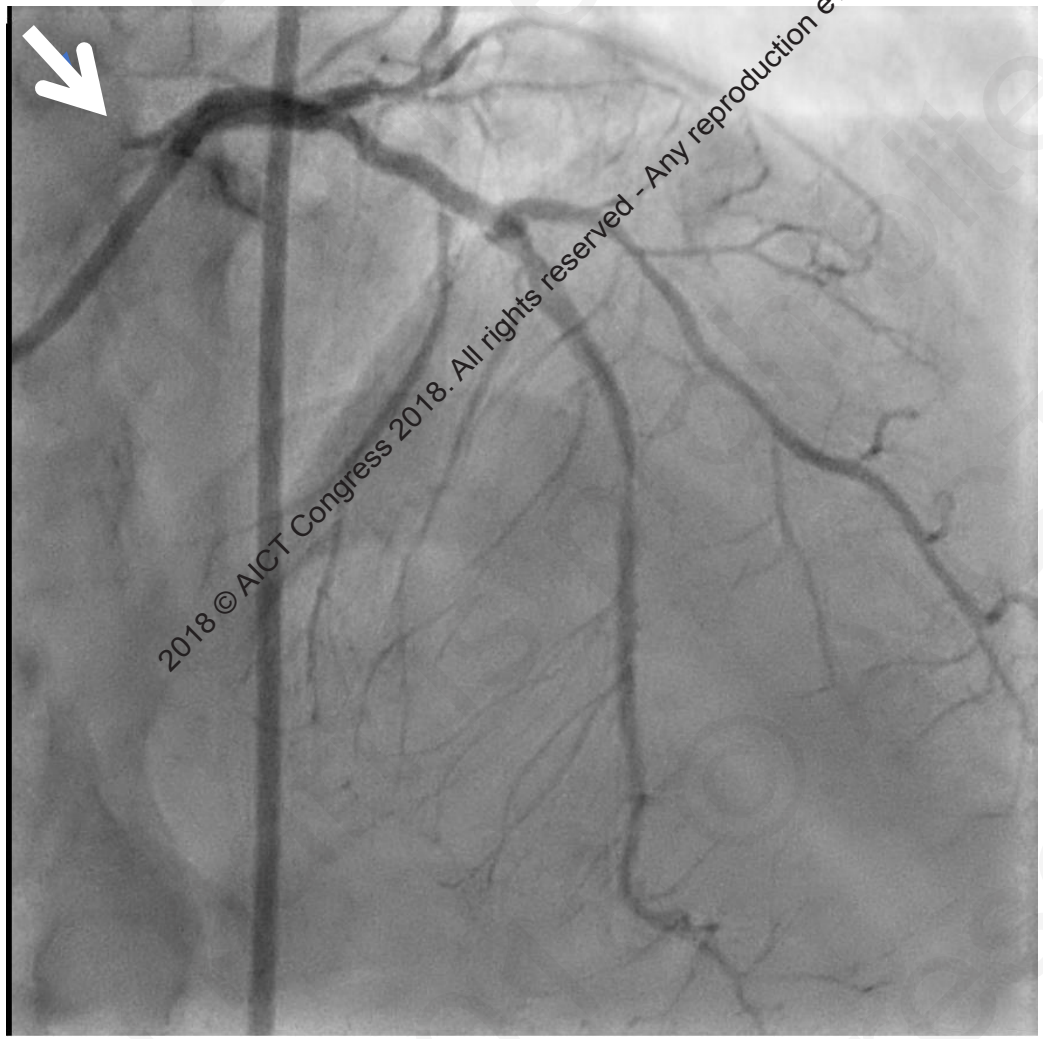




- Patient became restless and hemodynamically unstable.
- To perfuse LCA, we deployed the stent where-ever it was stationed.
- Patient's hemodynamics improved.
- Next challenge: after deployment, the deflated balloon was found entrapped.
- The only available option was to pull-out the whole catheter-wire-balloon assembly



Further challenges

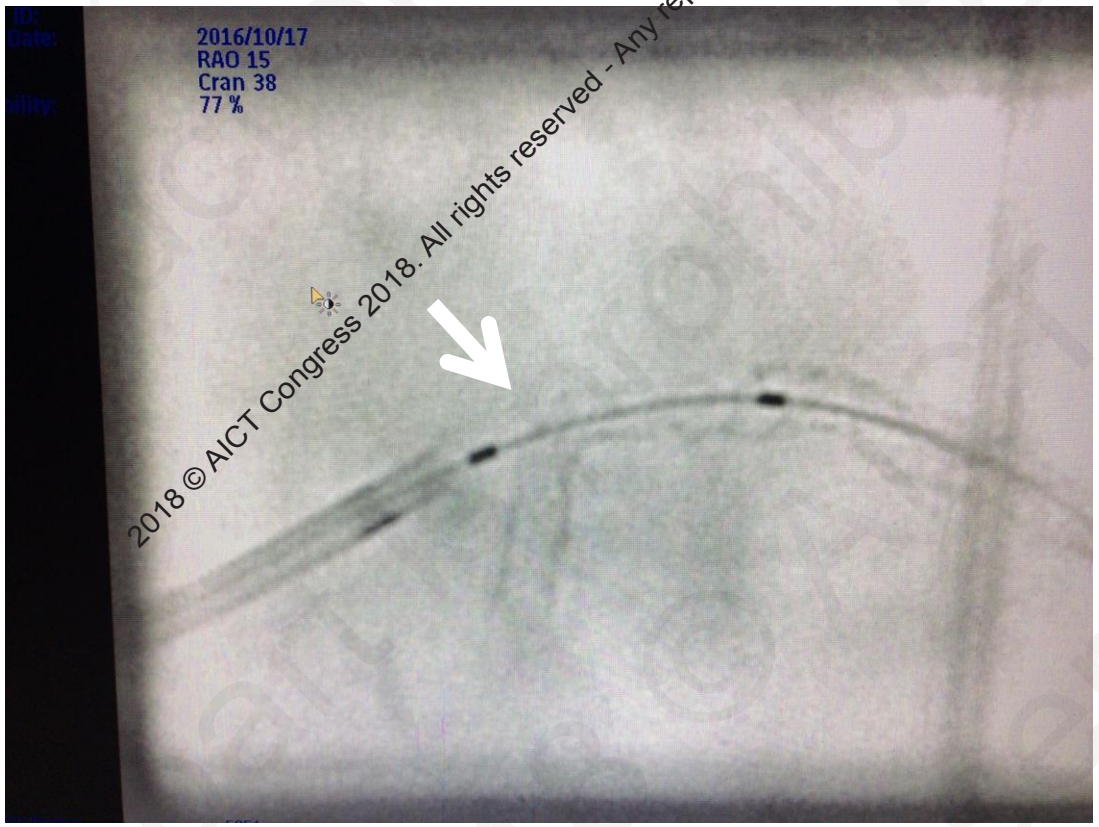


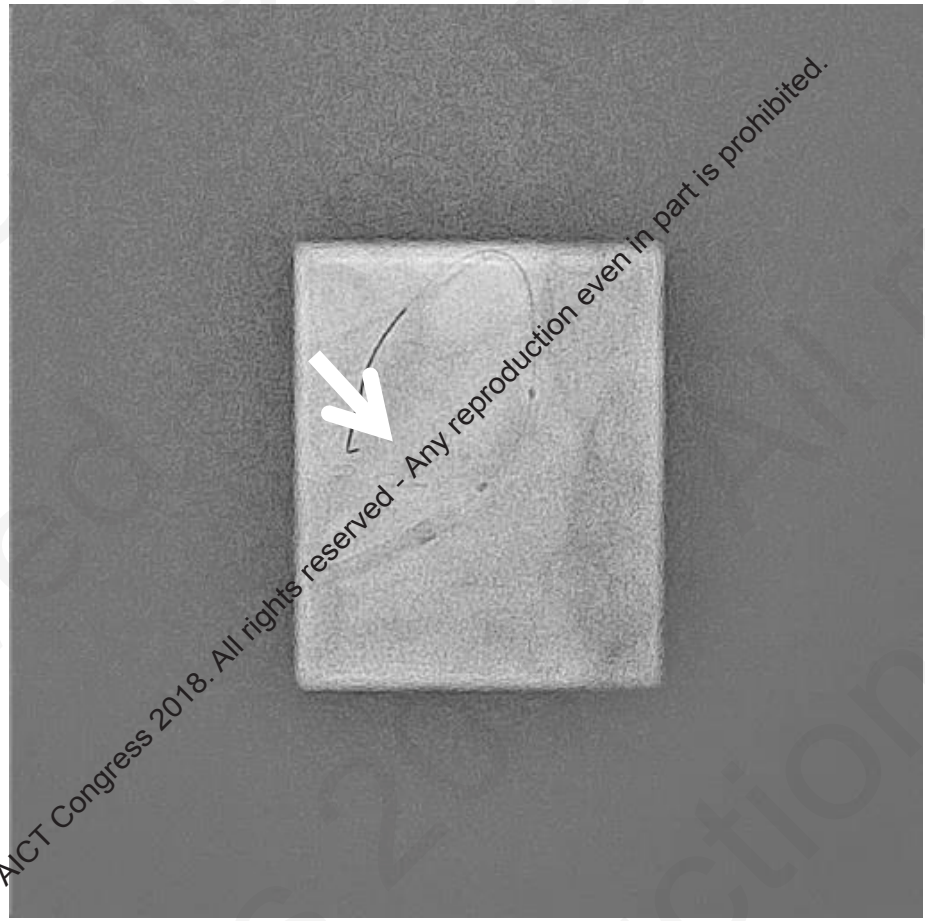
1. Residual dissected lesion in mid and distal LAD;
2. Re-engaging the guide, right onto the mouth of protruding stent and advancing second stent through freely hanging stent in aorta was almost impossible.

Options

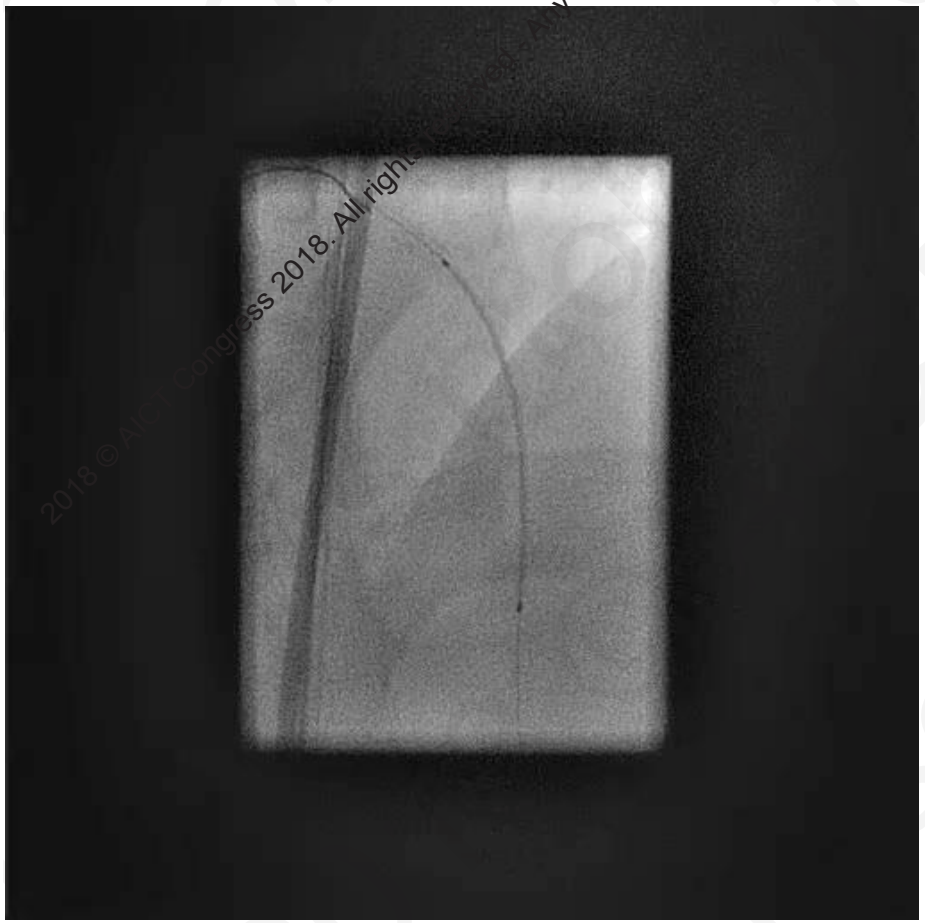
- Send for surgery
- Crush the stent to create a fresh LMCA ostium through which the second stent could be advanced.

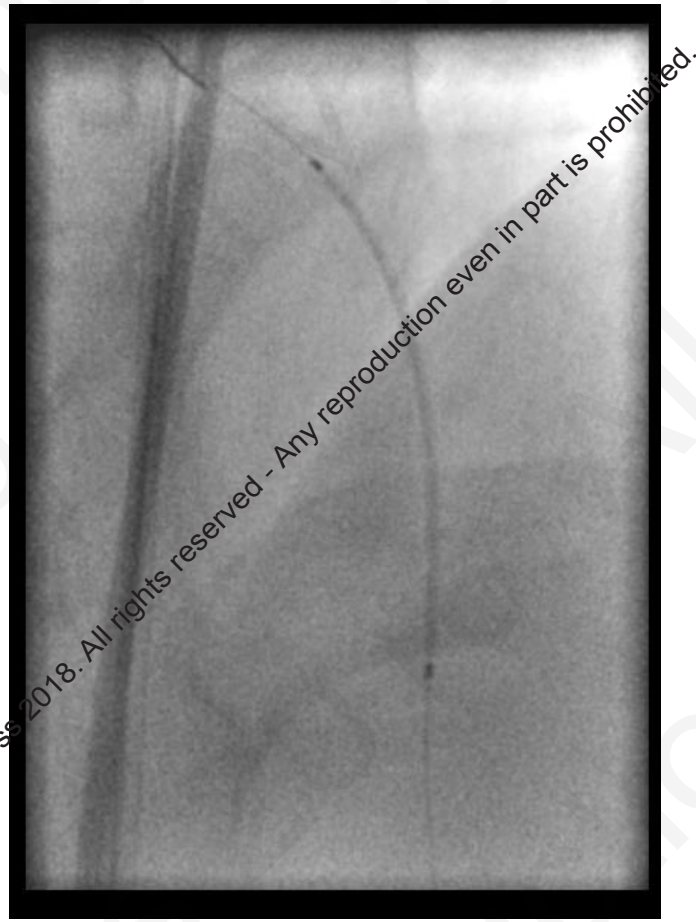
We crushed the stent at LMCA ostium, turning it away from the LM and created passage for the distal stent through dilated stent cells



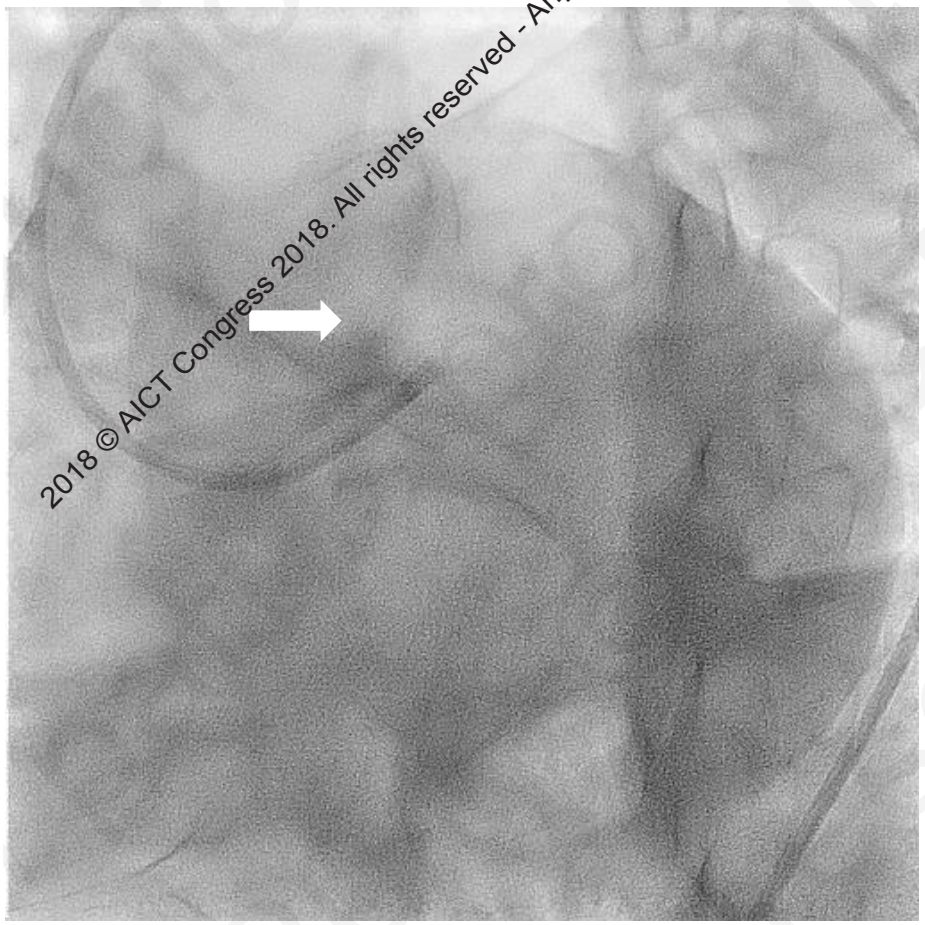


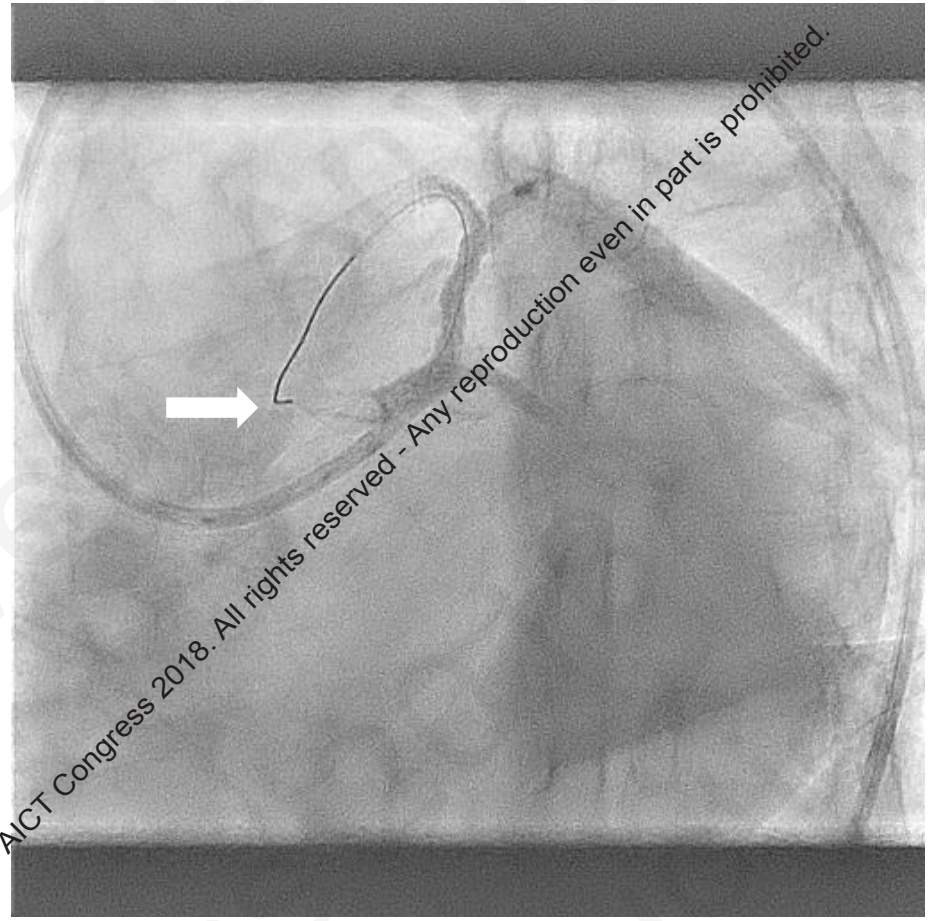
Another 2.75x40 mm DES advanced to mid / distal LAD and deployed at 12 atmosphere, 40 msec.



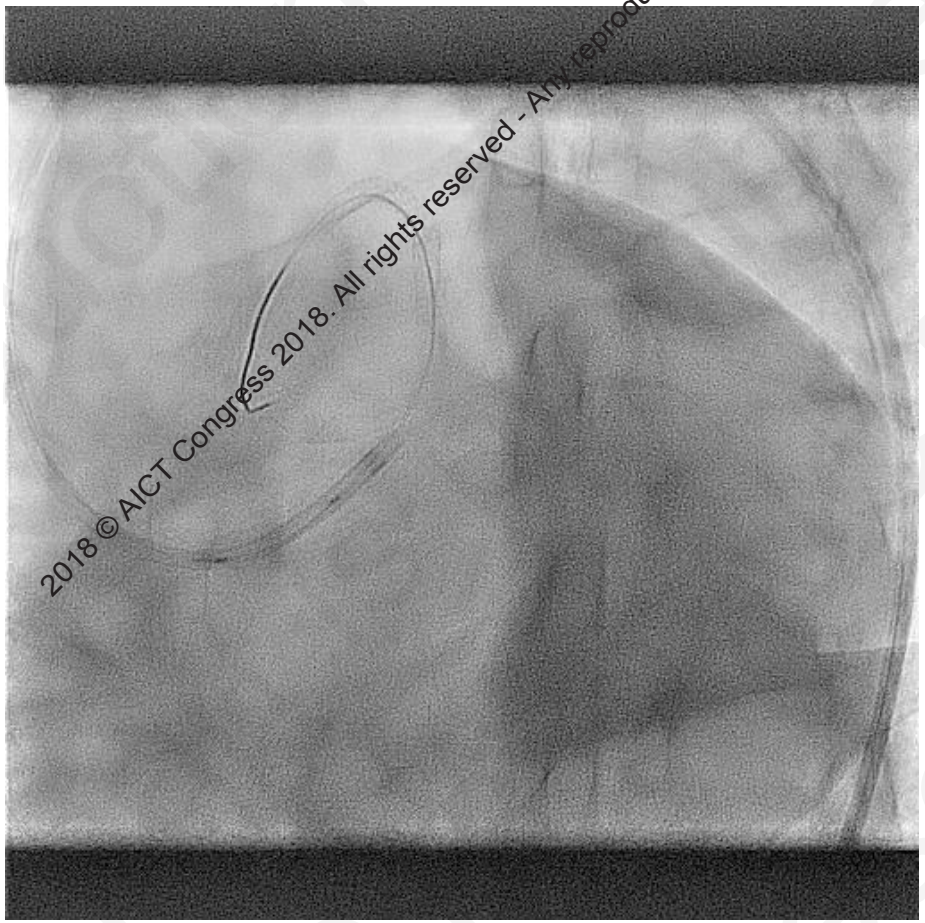


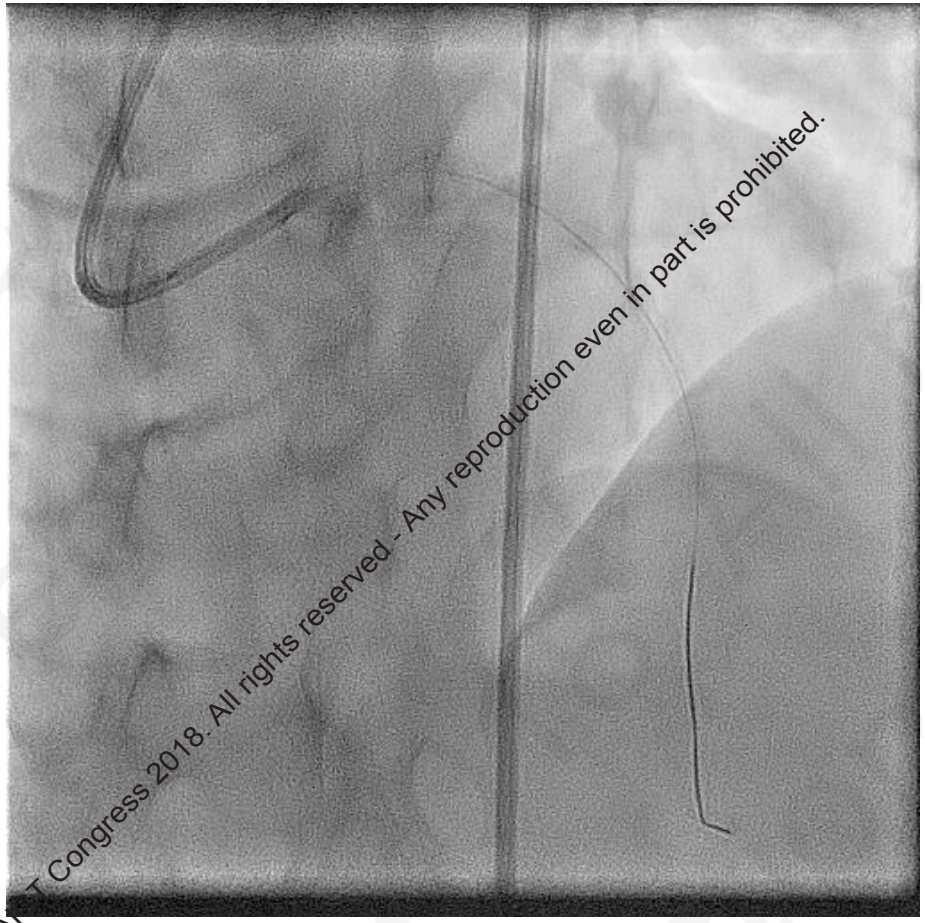
Repeated post-dilatations were done using non compliant balloons to enlarge the LMCA part of the first stent and to further crush the hanging stent (arrow)





Final result





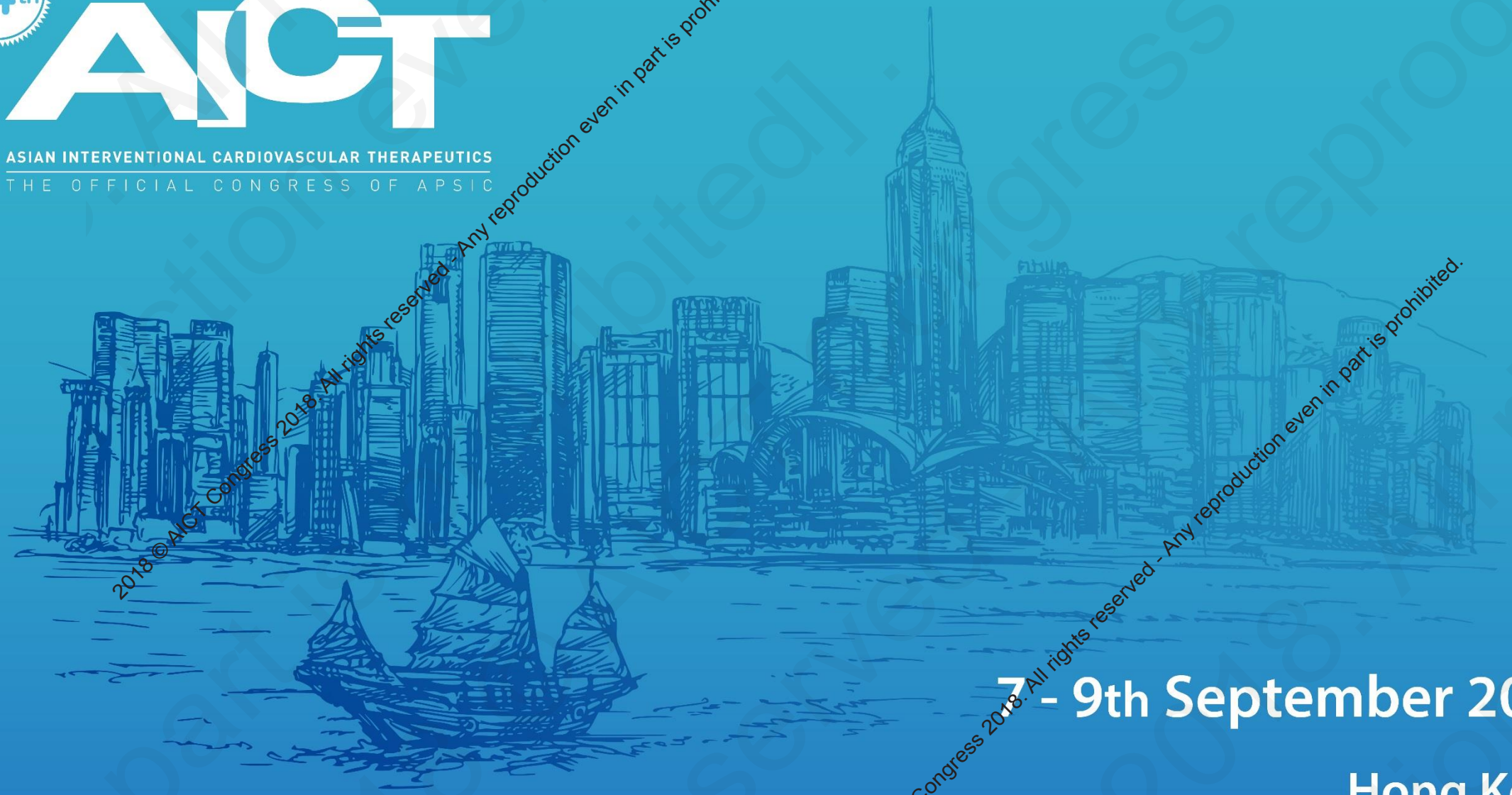
WHAT WE LEARNT FROM THIS CASE

- At times, hemodynamic instability precludes the surgical option; such situations may require unconventional methods.
- The probable cause for entrapment was manufacturing defect because
  - Second long stent passed easily through the same track.
  - Even the withdrawal of stent balloon was difficult after stent deployment.
- Although stent entrapments occur more often than not during PCI, we did not find any other case in the literature wherein stent was plastered away from the LMCA, creating a new ostium through which another stent could be tracked down to mid and distal LAD.

14th AICT

ASIAN INTERVENTIONAL CARDIOVASCULAR THERAPEUTICS

THE OFFICIAL CONGRESS OF APSIC



2018 © AICT Congress 2018. All rights reserved - Any reproduction even in part is prohibited.

7 - 9th September 2018

Hong Kong

Convention and Exhibition Centre (HKCEC)