



“Simple 3-vessel CAD...

can we have it done in 60 minutes?

Dinh Duc Huy, MD, FSCAI

Tam Duc Heart Hospital

HCMC- Vietnam



Conflicts of Interest

Speaker's name : Duc-Huy DINH, HCMC, Vietnam

I have no potential conflicts of interest to report

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

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

Clinical presentation

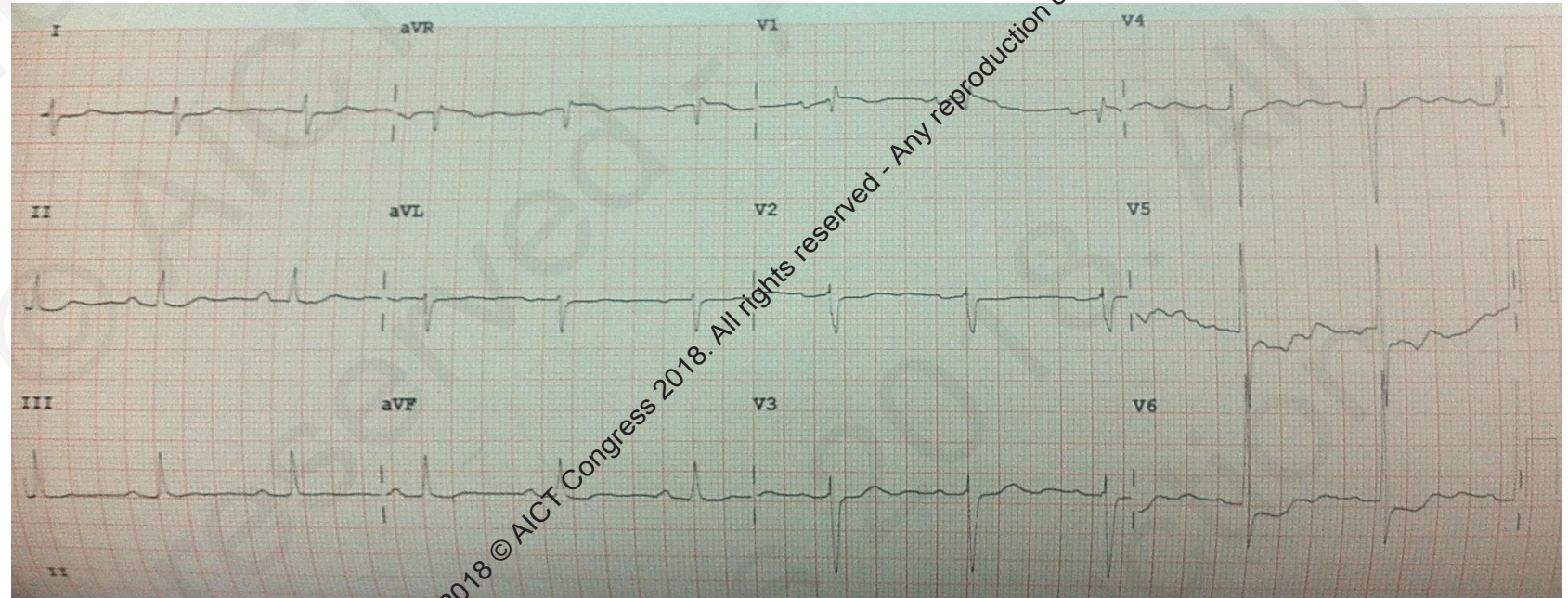
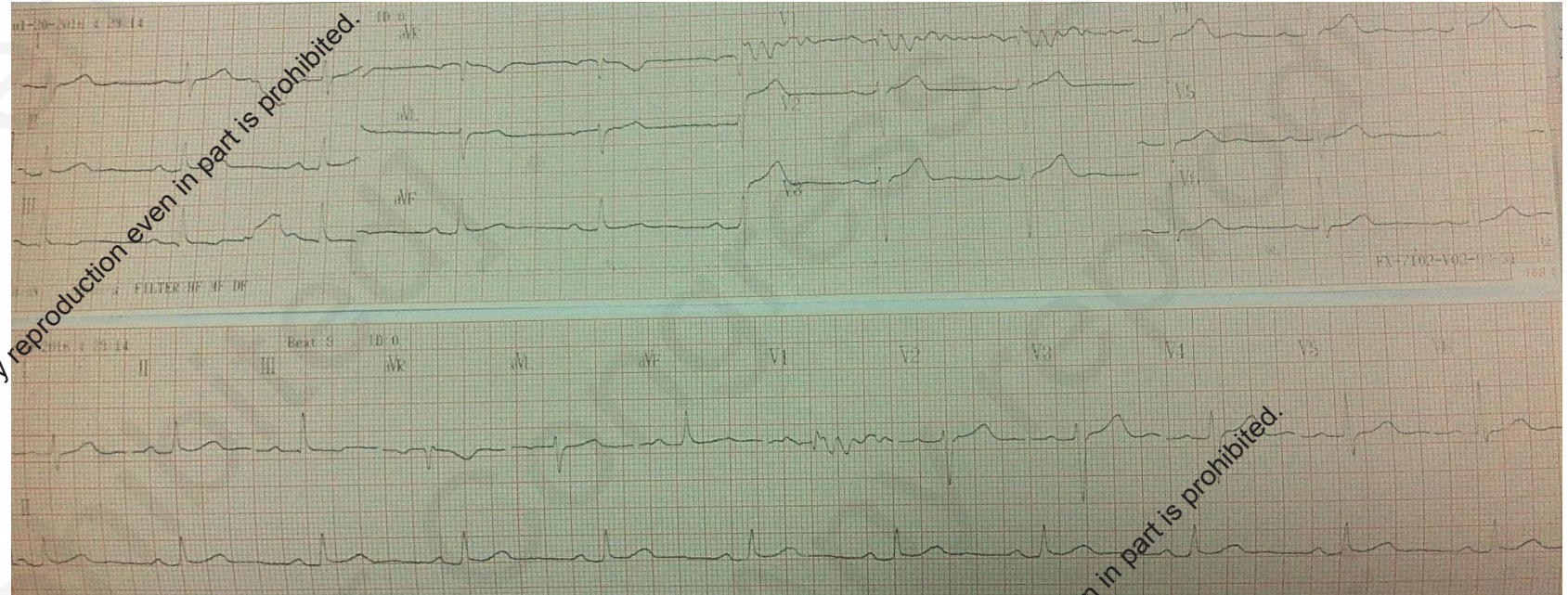
- 68 year-old lady
- BMI 19 (H 155, W 46)
Hypertension, Dyslipidemia
- CTA= moderate to severe lesions in 3 vessels
- High risk unstable angina

- Unremarkable examination
- Negative hs-TnT
- Echocardiography:
 - LVEF 72%; No RWMA
 - No valvular heart disease



EKG at ER

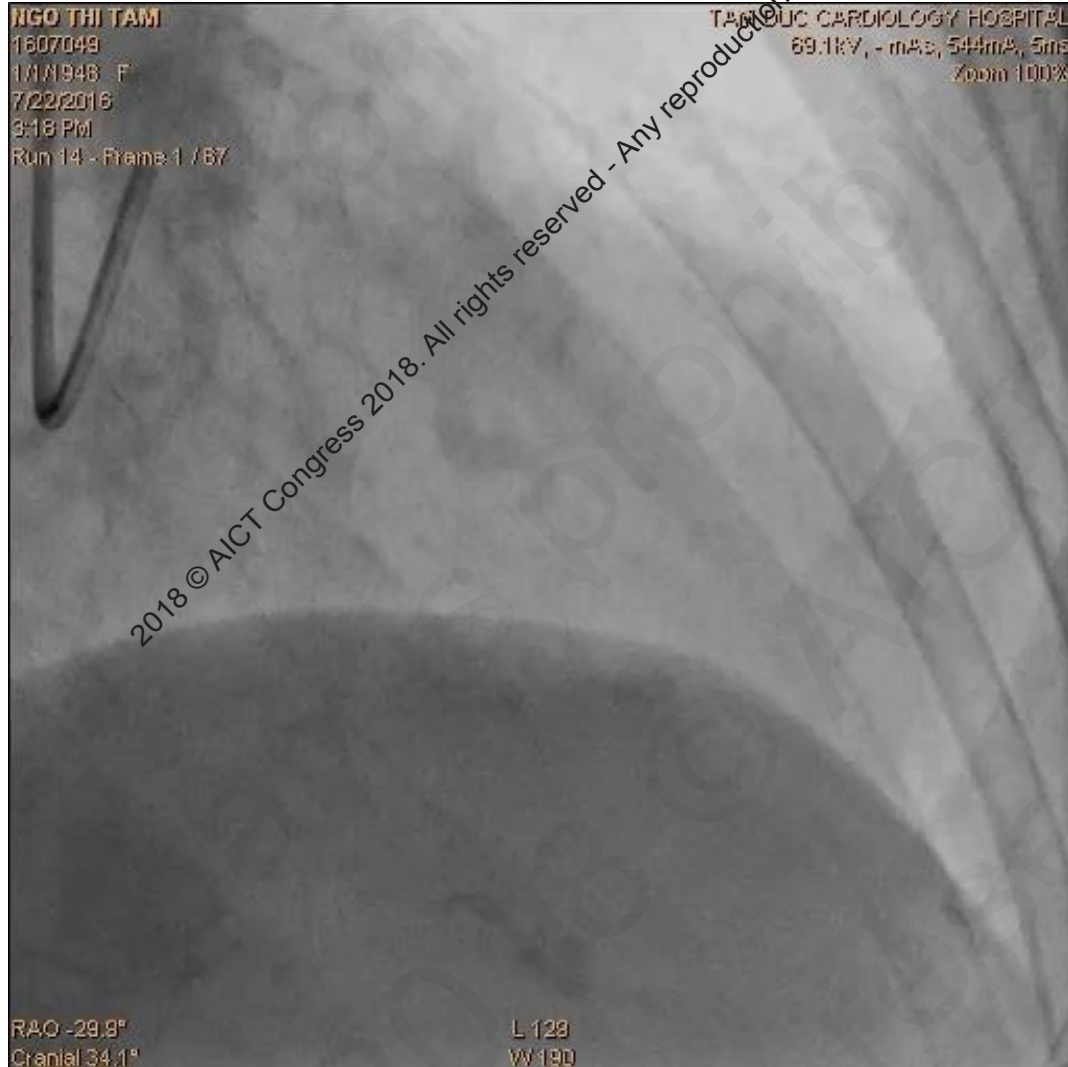
ST depression in V5-V6
during chest pain



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



CAG (3 VD- SYNTAX score 24)- for PCI



Q1. Will you put up a 3-VD PCI 24 hours before your flight?

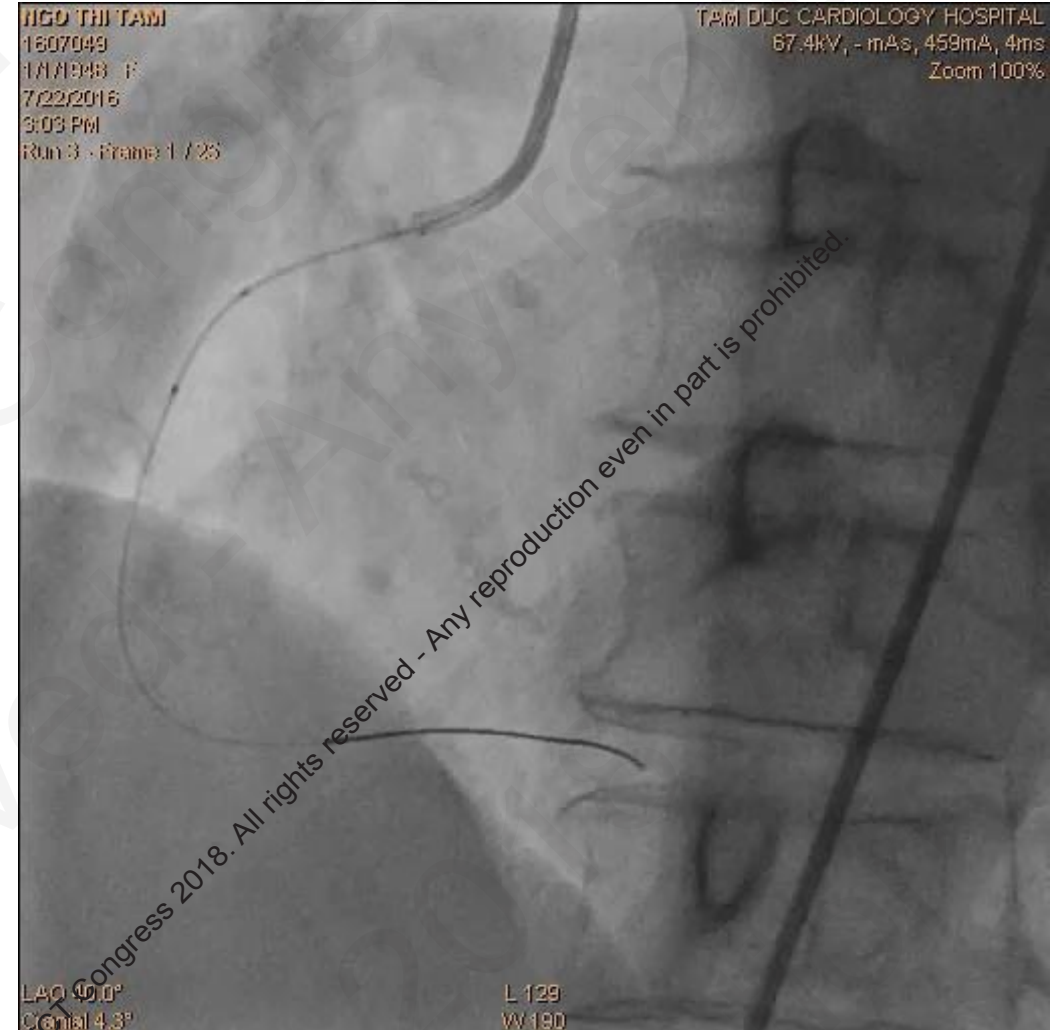
- A. Yes
- B. No

Case was started at about 15.00

Hopefully to finished in about 60 minutes

Plan to see patient next morning and

Flight at 14.30





Proximal RCA PCI (2.75x33 mm DES)- 3.12 pm



- RFA approach
- 6 Fr. BL guide
- 0.014" for both LAD, LCx
- Pre-dilate LCx
- 2.5x18 mm DES LCx- 3.29 pm
- TMI 3 post LCx stent
- Plan for full-metal LAD
- Pre-dilate from distal LAD with 2.0x15 mm then 2.5x15 mm balloon



PCI LAD (overlapping 2.5x36 mm & 3.0x33mm DES)- 3.38 pm



Post-dilate with stent balloon and... 3.39 pm





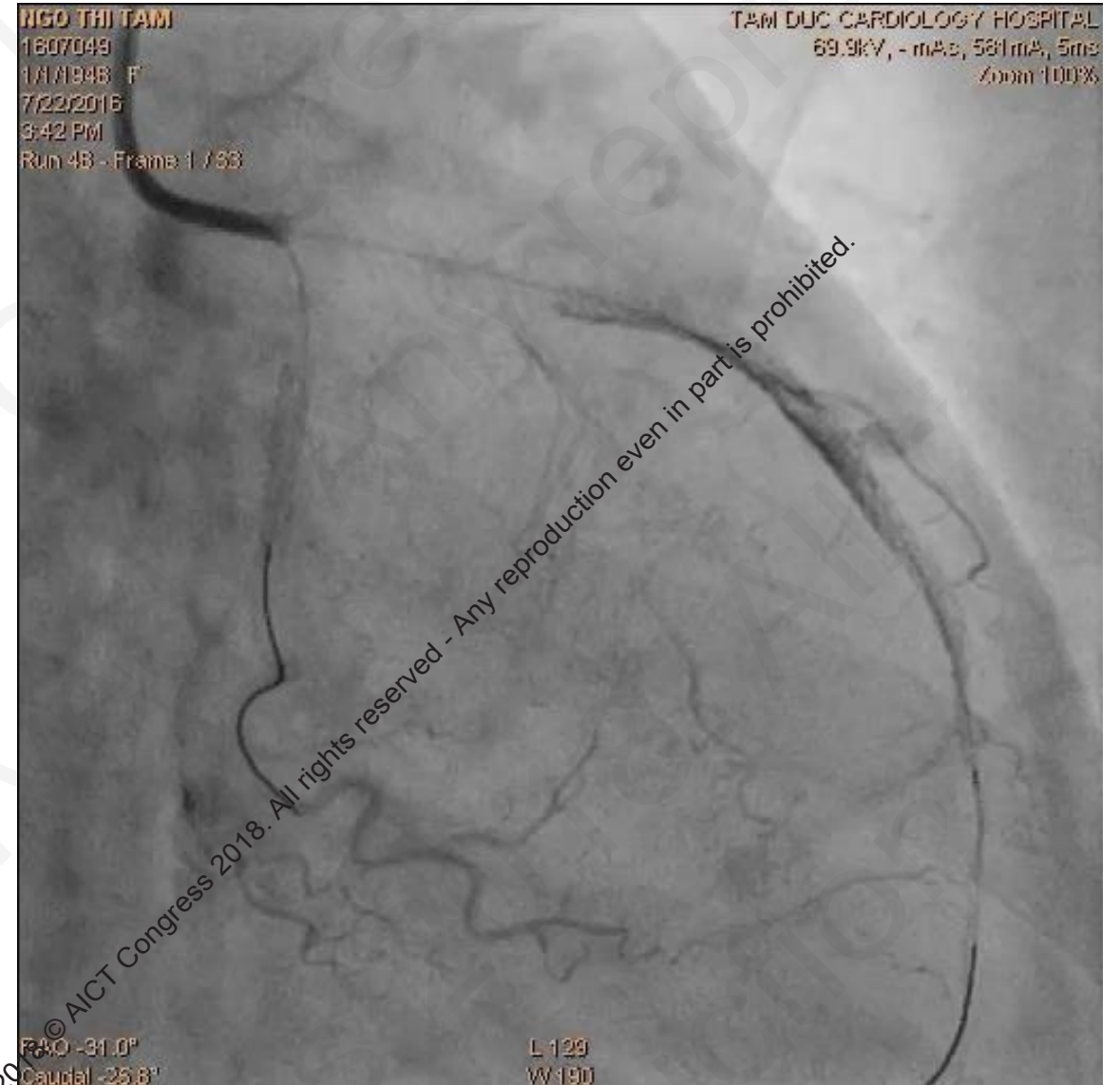
Q2. What is your plan?

- A. Reverse heparin by protamine, do pericardiocentesis
- B. Long balloon inflation
- C. Covered stent
- D. Call surgeon

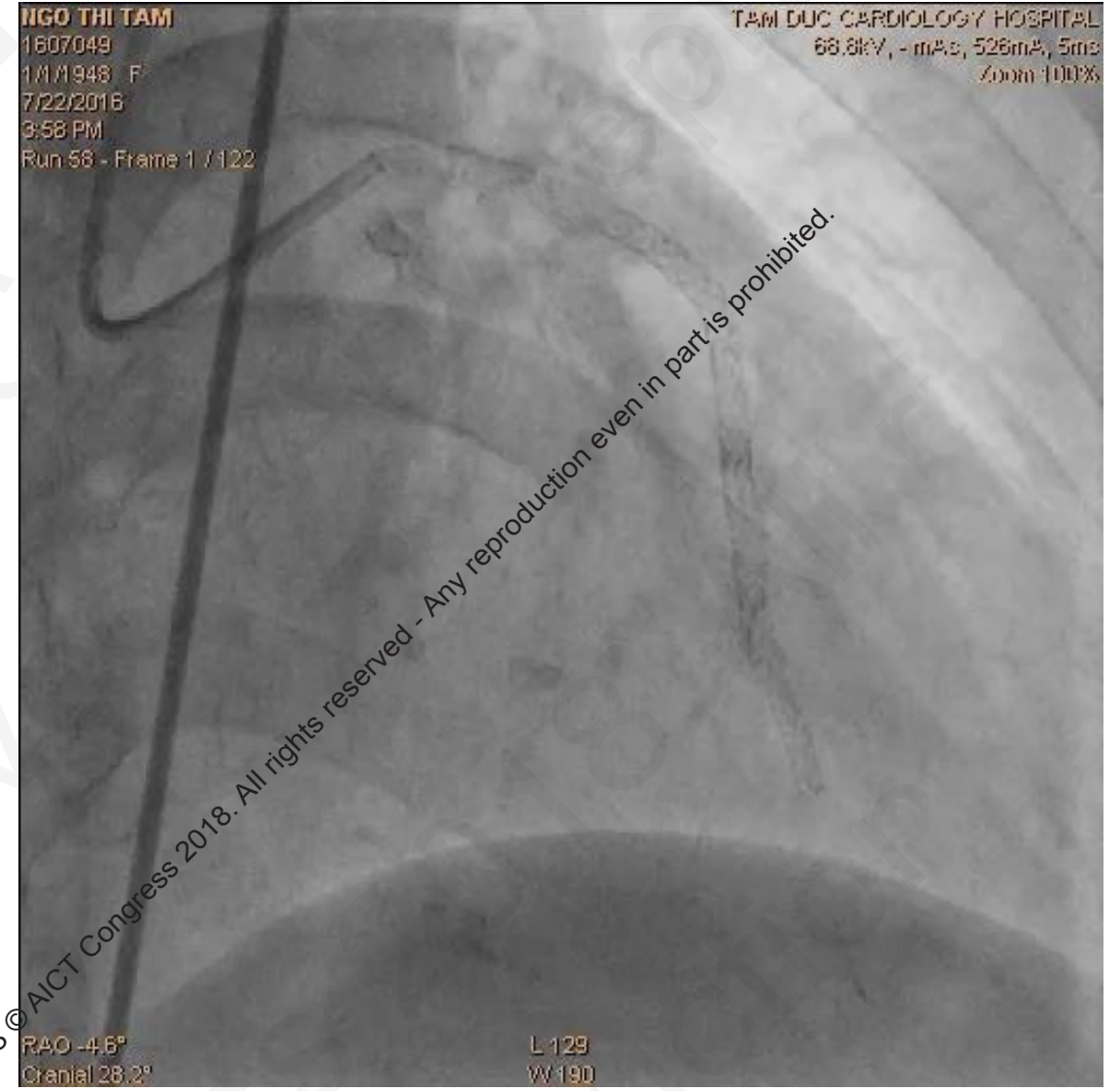
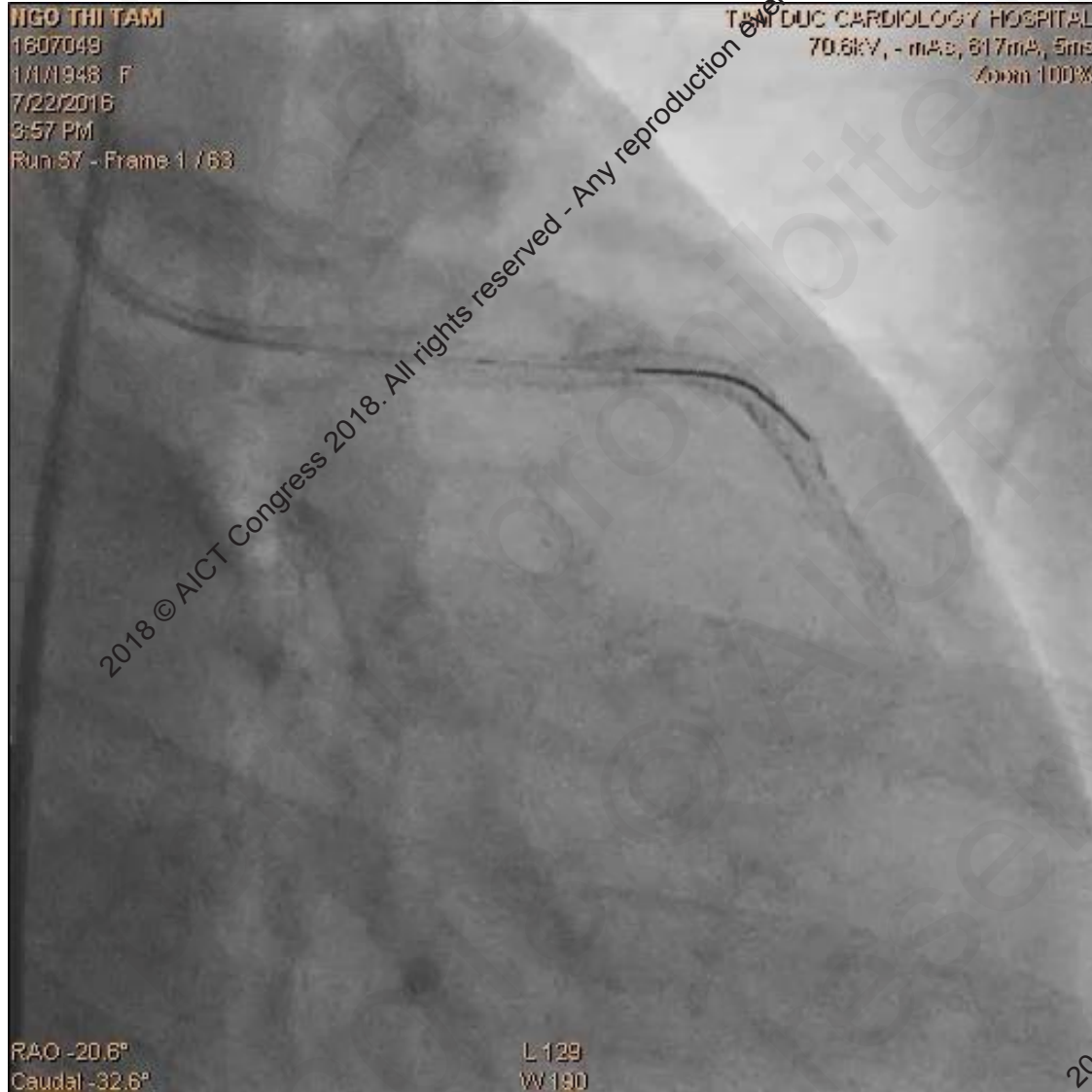
Big perforation and fixed by 2.75x18 mm covered stent (only size available)- 3.42 pm



- Perforation was almost sealed
- Patient became very unstable
- Chest pain (+)
- BP dropped
- In-cath-lab echo: large pericardial effusion with RV compression
- IV Inotropes started
- Intubated
- Finished PCI procedure with one more 3.0x28 mm DES in proximal LAD



Final - fast HR, no more perforation- 3.57 pm



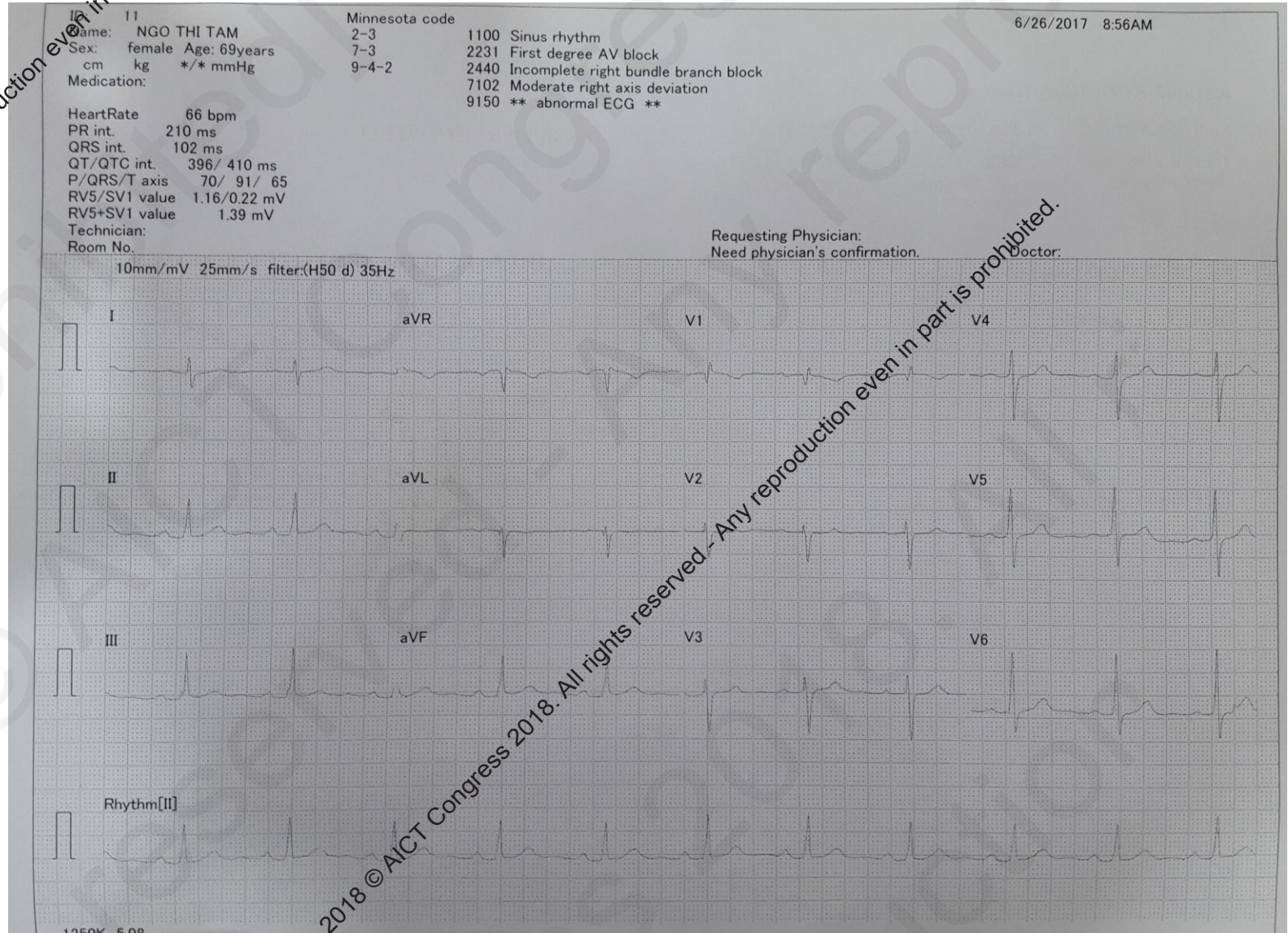
- Consulted with on-call surgeon (in hospital)
- Moved patient to OT for cardiac drainage (250 ml red blood taken out)
- BP 98/60mmHg HR 110bpm, CVC 6-7mmHg
- Hct 28%, Hgb 10 g/dL → Blood transfusion started (1 unit) → Hgb 11g/dL
- D1: Extubation
- Pericardial drainage → 300-600ml red blood
- 18 pm echo= large PE with RV compression

- Cardiac drainage blocked
- BP dropped gradually 80/50 mmHg (23 pm)
- To OT again for sternotomy procedure (D2)
- LAD was torn # 1mm; still bleeding → corrected
- LIMA graft to big diagonal
- Inotropes support
- Transfusion (RBC, Platelet...)
- Maintain Ticagrelor and aspirin

- D3- Echo: large pericardial effusion with RV compression
- Back to OT again to clean up clean the pericardial cavity and redo the pericardial drainage
- Blood transfusion+ Inotropes support
- Acute liver injury due to hypovolemic shock
- Heart failure
- Ventilator acquired pneumonia → IV antibiotic (Meropenem, Linezolid, Levofloxacin) x 10 days
- Gradually improved → discharged after 22 days of hospitalization
- HR 80 BP 120/75- No chest pain- LVEF 50% with small pericardial effusion

Follow up 12 months after PCI

- Well, comfortable
- No chest pain
- Daily exercise, walking
- Tolerate well with DAPT
- No bleeding
- EKG SR
- LVEF 52%
- LDL-C 2.2 mmol/L



Messages from case

1. There is no “simple” 3-vessel disease
2. Perforation, even if sealed by covered stent, can be dramatic
3. Difficulty of how to balance “risk of stent thrombosis” vs. “severe bleeding” (this patient received totally 5 DES [could be considered as complex intervention] & underwent CABG with ongoing DAPT)
4. Support from cardiac surgeons did help to save this patient

14th

AICT

ASIAN INTERVENTIONAL CARDIOVASCULAR THERAPEUTICS
THE OFFICIAL CONGRESS OF APSIC



7 - 9th September 2018

Hong Kong

Convention and Exhibition Centre (HKCEC)

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

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