Young Male With aVR STEMI Complicating Cardiogenic Shock Due To Left Main Bifurcation Disease Successfully Treated With Culotte Technique

Aruna Wijesinghe, Ajith Dissanayake, Chamidi Siriwardana Indika Marasinghe, Anidu Pathirana, Gamini Galappatti National Hospital of Sri Lanka, Colombo Sri Lanka





## **Conflict of Interest**





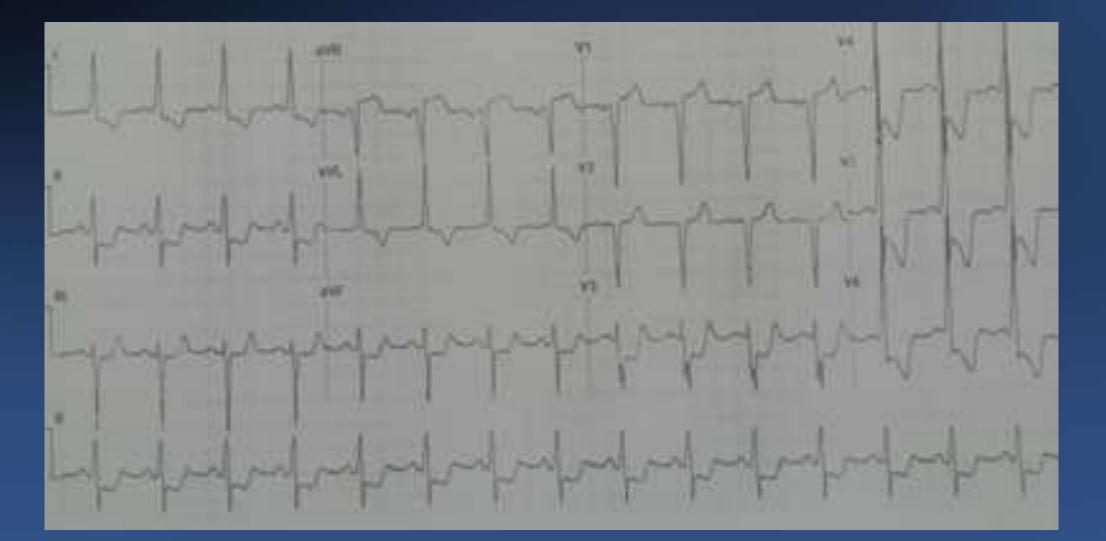


# **Clinical Background**

- A 36 year old male with a recent history of ACS was referred for early Coronary angiogram.
- No coronary risk factors
- Heart rate 90 /min and blood pressure 130/70 mmHg.
- While taking the radial access, patient developed severe central chest pain.
- During the angiogram his pulse rate increased to 160's /min and blood pressure dropped to 85/60 mmHg.
- Started coughing productive of frothy sputum
- Killip IV heart failure.
- IV Inotropes/ frusemide bolus followed by infusion
- Critical care team was alert



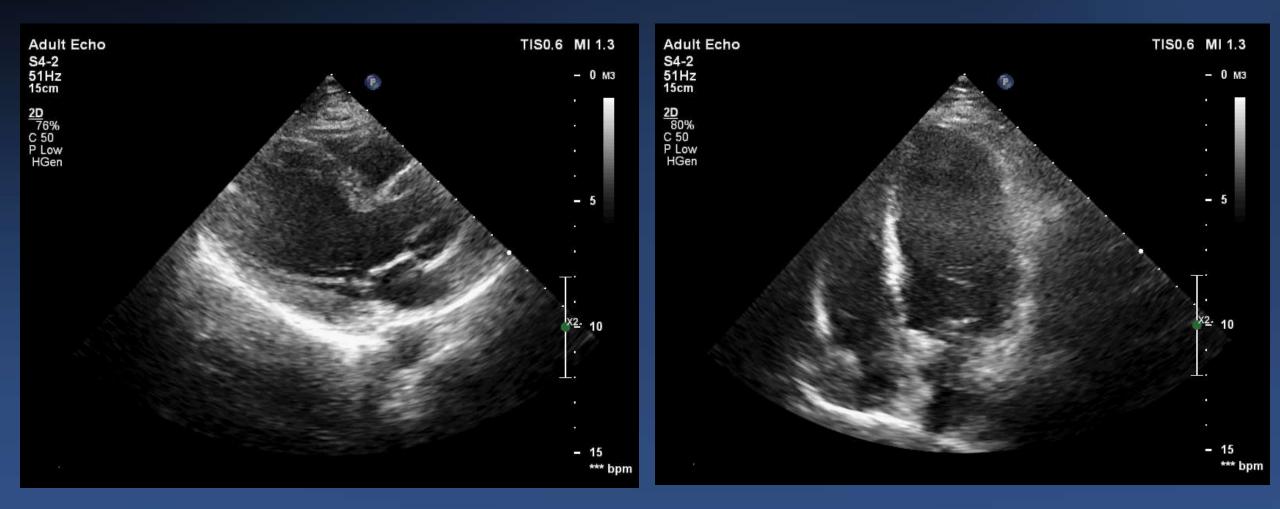








#### Echocardiogram

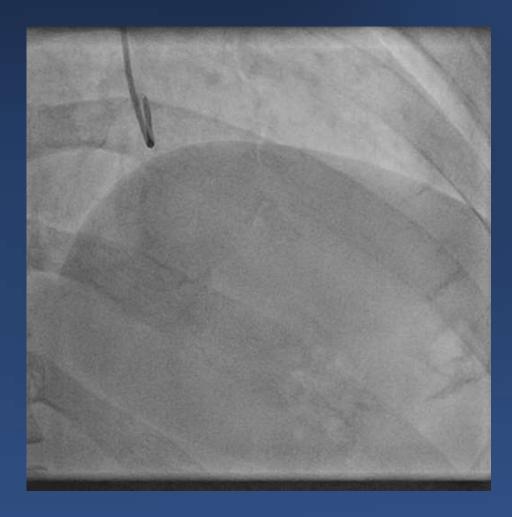






# **Coronary Angiogram**



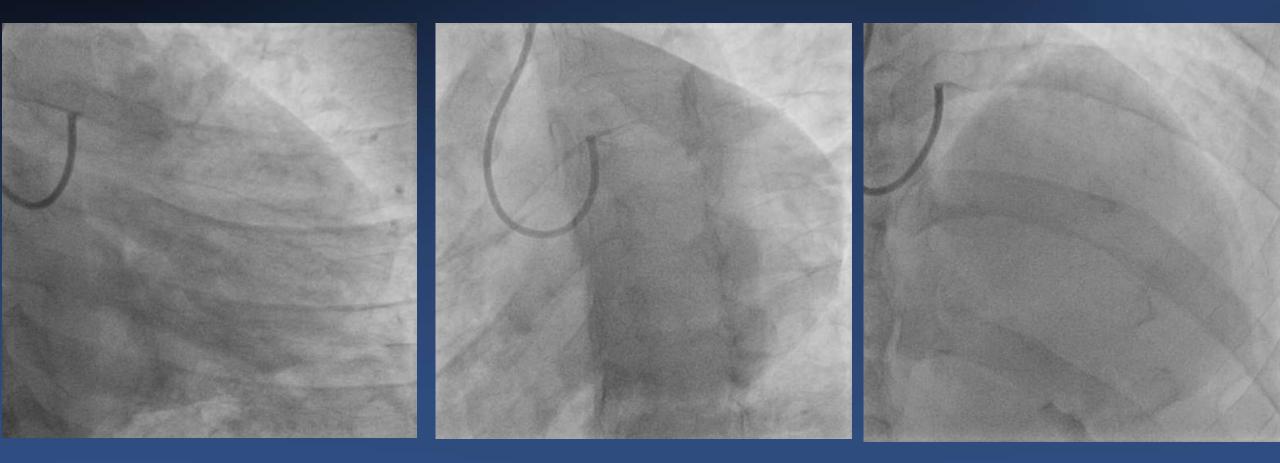




6F Radial (Terumo) sheath, 5F TIG



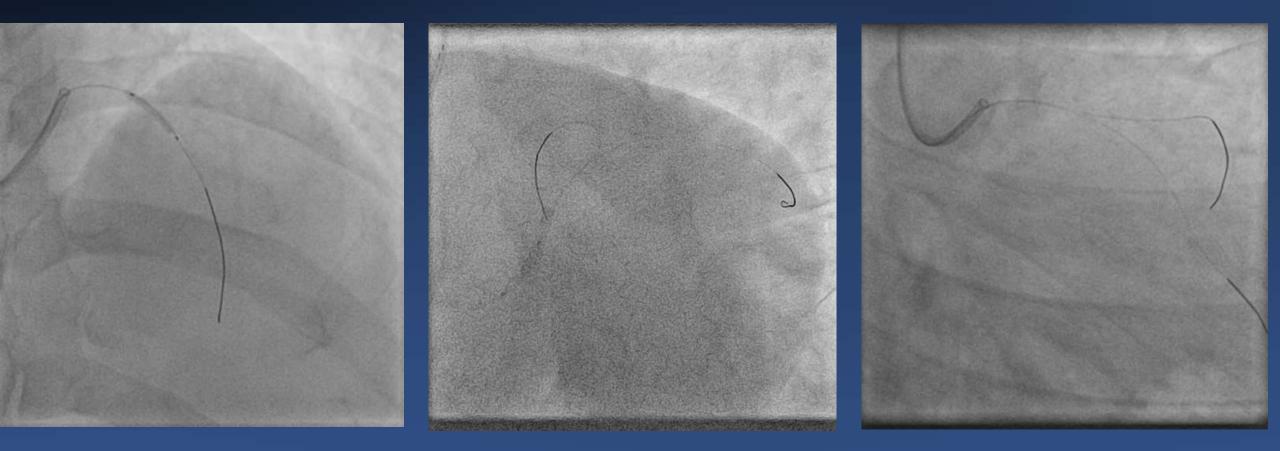
# **Coronary Angiogram**







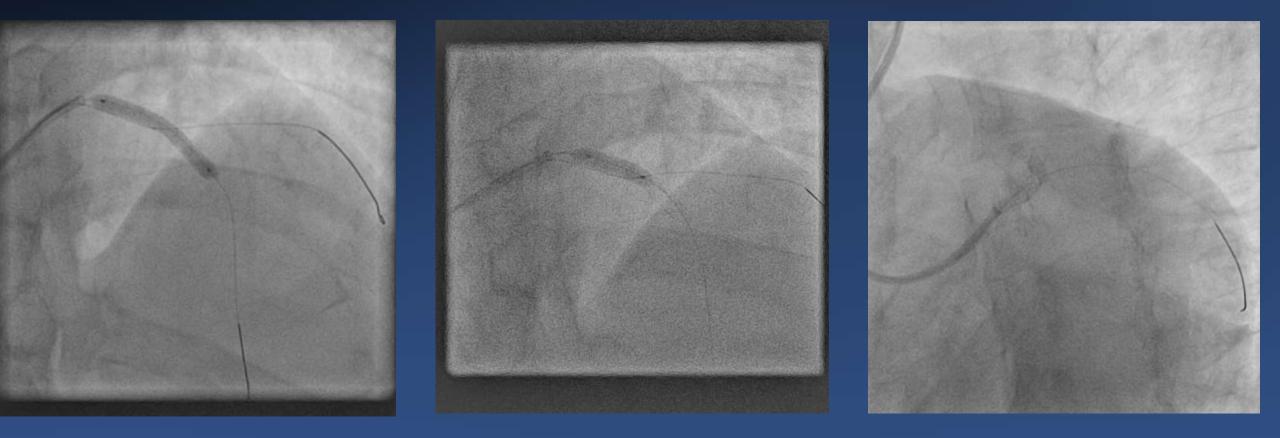
#### **Procedure – Pre dilatation**







### **Procedure – LMS to LAD**

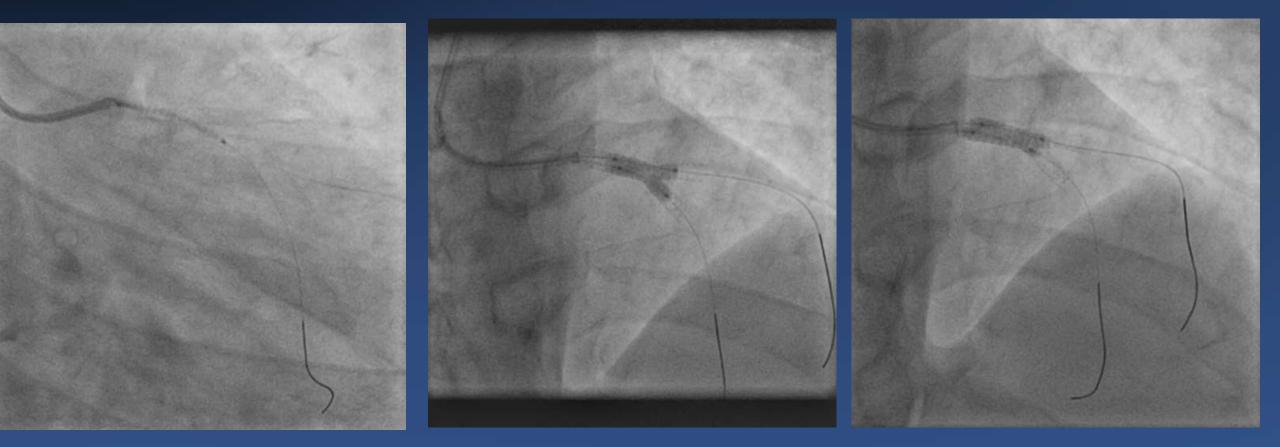




Xience Prime 3.5 x 24mm, 3.5x8 NC Trek



#### Procedure

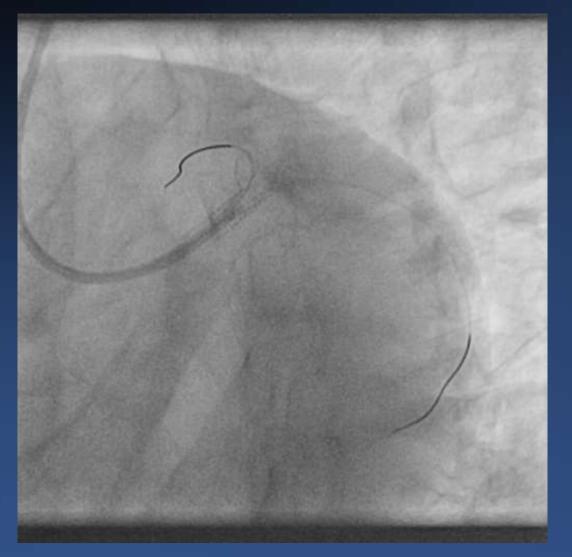


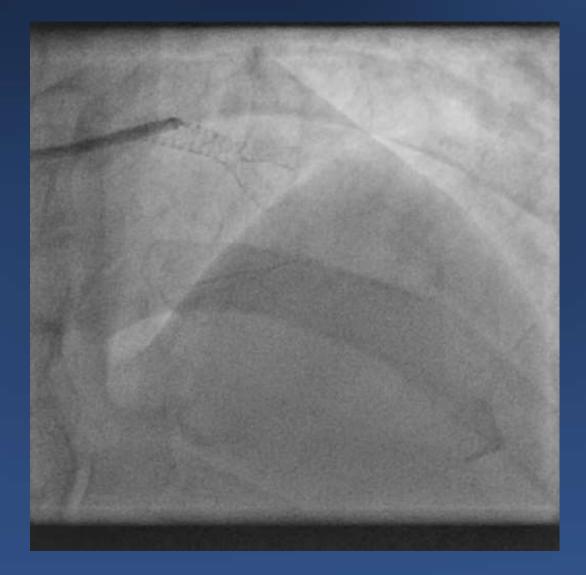


2.5 X 8 mm NC Trek, Xience Prime 3.5 x 24mm, 3.5x10 NC Sprinter



# Procedure









#### **Out come**

- Patient's haemodyanamics improved after opening the vessels
- Patient had an uncomplicated recovery and discharged on day 4
- At one month, asymptomatic, LV EF 50%
- Awaiting non invasive evaluation with Ex ECG
- On Aspirin life long, Clopidogrel extended period (?3 years)





#### What could we have done better?

Cross over to femoral from the beginning, or 7F GC (even radial)

IVUS – Left main bifurcation





#### **Discussion Points**

#### • MDT ?

- Cullote vs DK Crush ?
- IABP ?
- Antiplatelet duration ?





### **Conclusion/Take-home Message**

 Culotte technique, relatively simple yet elegant bifurcation stent technique, can be used to treat distal LMS bifurcation in an acute unstable setting



