

# IATROGENIC LEFT MAIN CORONARY ARTERY DISSECTION



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Introduction

Yangon General Hospital (YGH) is a biggest tertiary center in Myanmar.  
Primary Percutaneous coronary intervention (PCI) was started regularly since 2013.  
In the situation of more and more primary PCI cases, we met serious complications.  
Iatrogenic left main artery (LM) dissection is a rare but serious complication of coronary intervention.  
Prompt management with stenting is life-saving procedure.

Figure (1) Number of Primary PCI cases (2014 to 2018) in Yangon General Hospital

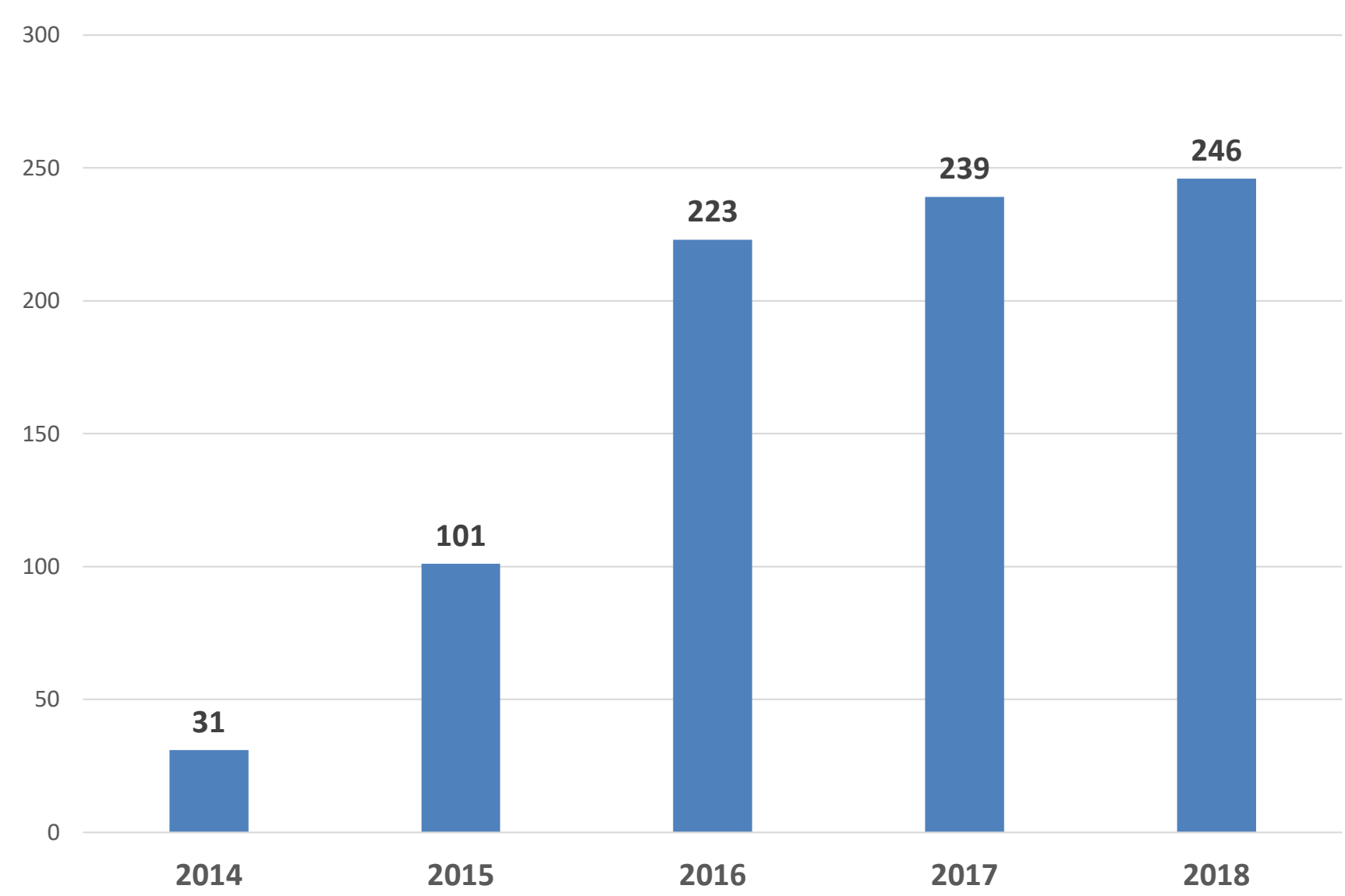
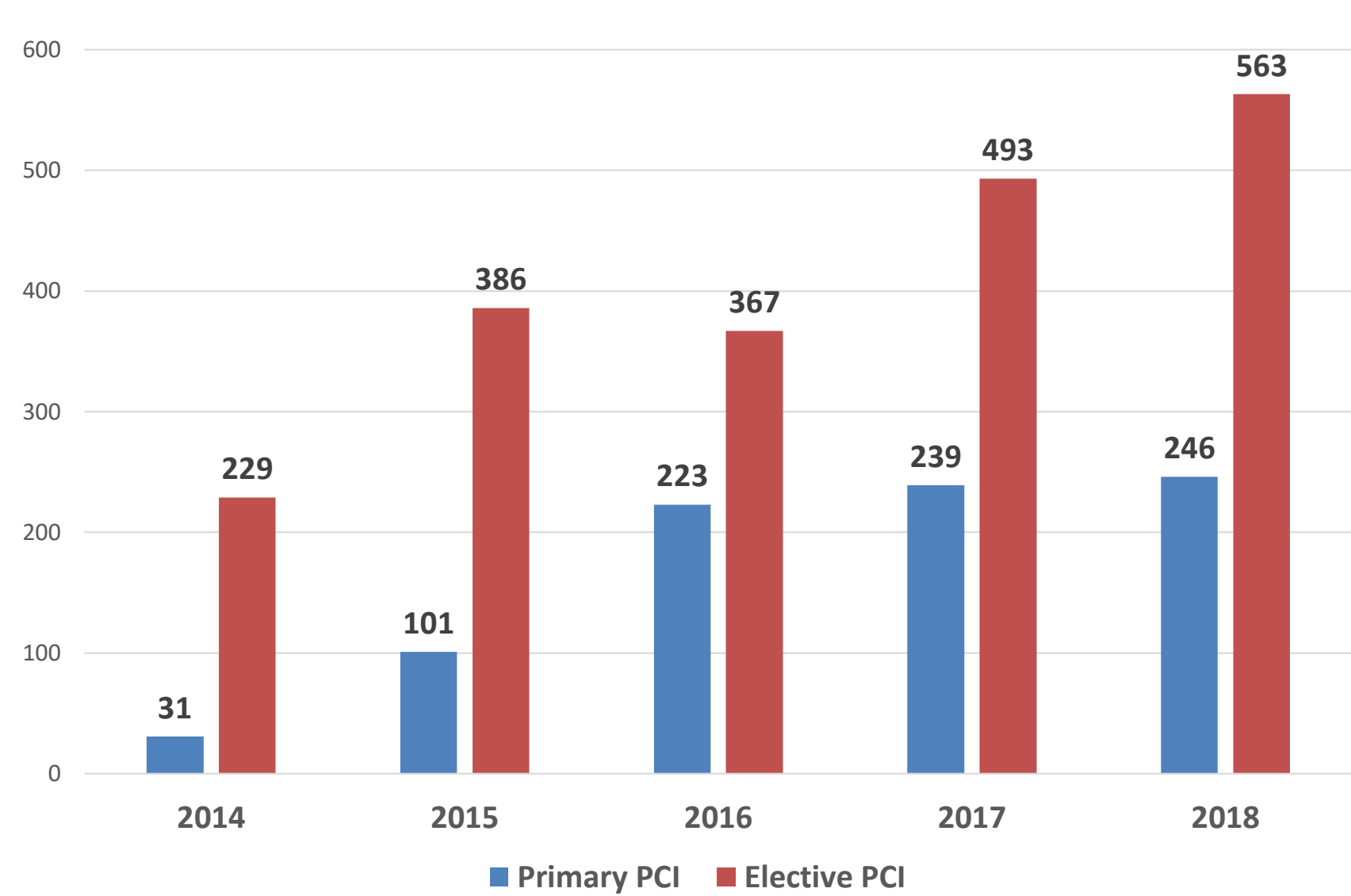


Figure (2) Number of Primary vs Elective PCI cases (2014 to 2018) in Yangon General Hospital



A 64-year-old lady presented with acute anterior myocardial infarction was admitted to Yangon General Hospital.  
She had hyperlipidemia and hypertension.  
Her electrocardiography showed ST elevation at anterior leads.  
She underwent cardiac catheterization, revealing discretely mid 100% occlusion of her left anterior descending (LAD) artery and diffusely disease 40% at proximal right coronary artery.

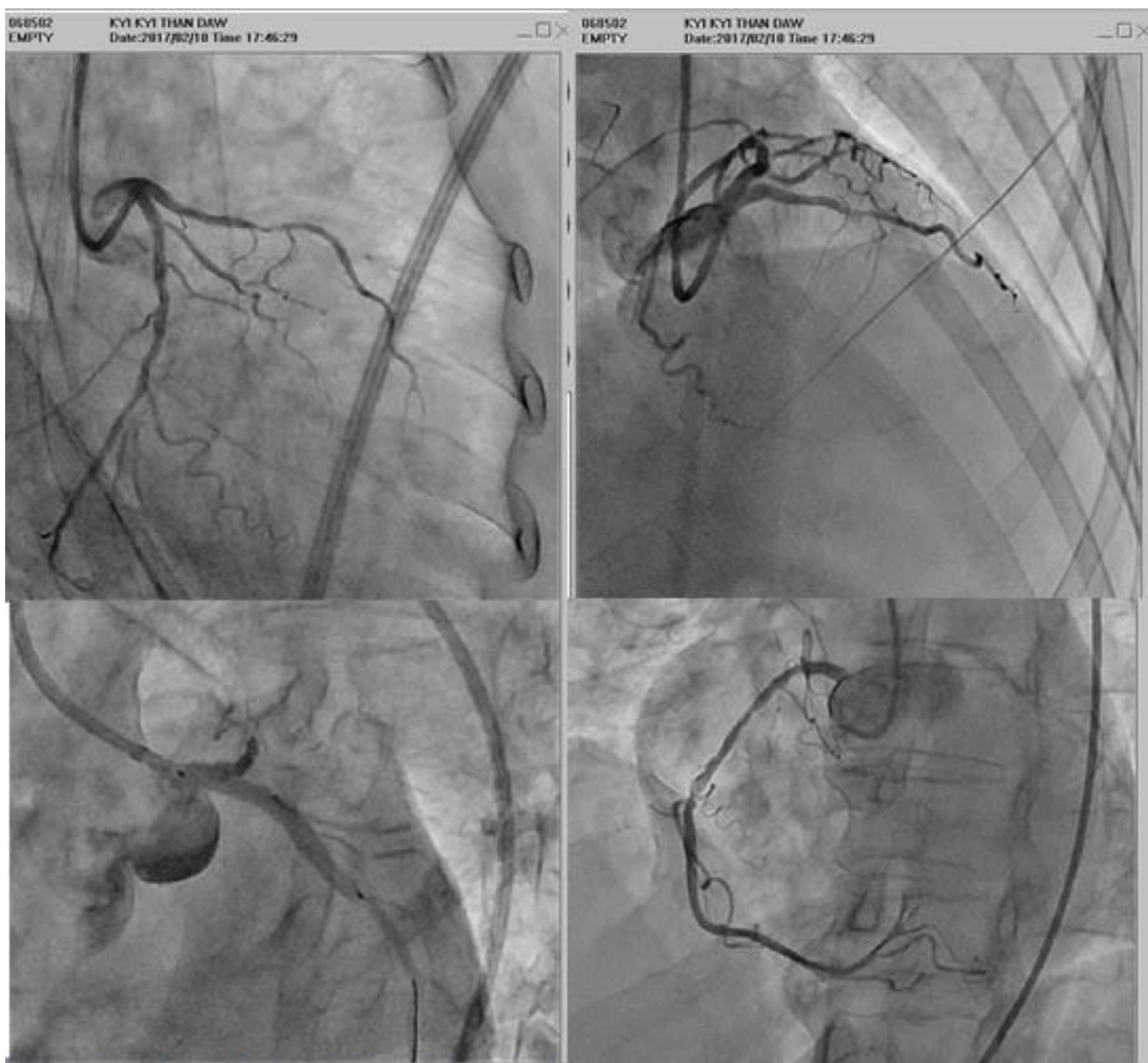


Figure (3) Coronary Angiogram of Patient

The decision was made to proceed with a LAD percutaneous coronary intervention (PCI).  
The first attempt with guiding EBU 3.5 was not well engaged.  
The forceful attempting to get good alignment caused dissection of left main (LM) with extension to proximal LAD.  
She had cardiogenic shock and ventricular fibrillation and successfully defibrillated and resuscitated.  
Guiding catheter was changed with EBU 3. Crossing the lesion with Runthrough NS guide wire was unsuccessful due to distortion by dissection plane.  
Urgent decision was made to proceed bailed out PCI to LM-Left circumflex artery (LCx).  
Direct stenting of LM to LCx with Gazelle 3.25 x 28 mm was done via Runthrough wire .

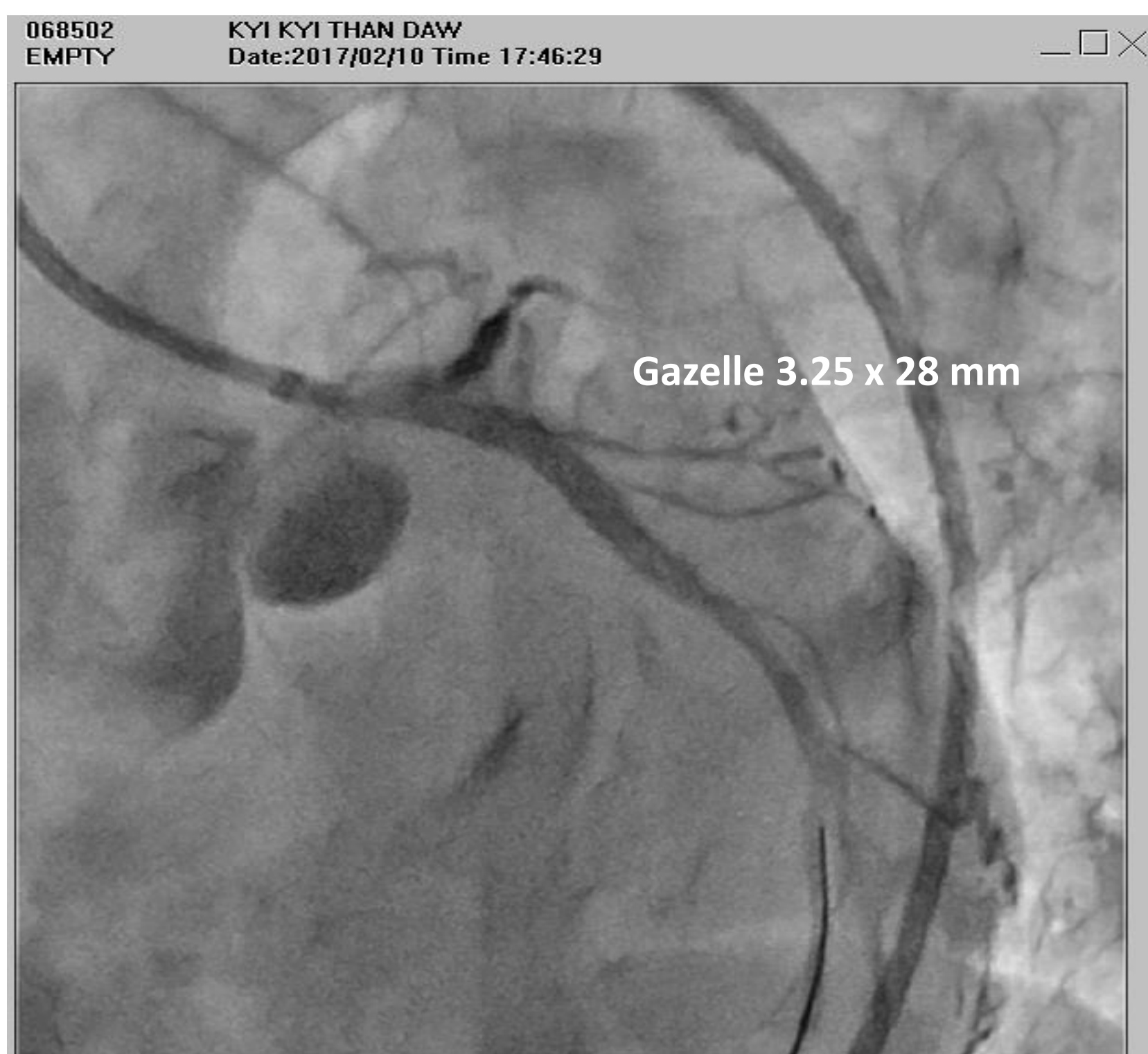


Figure (4) LM to LCx stenting

After that, her haemodynamic status became stable.  
And then a Sion guide wire was tried to cross LAD and stented with Integrity 3.0 x 18 mm by Culotte method.

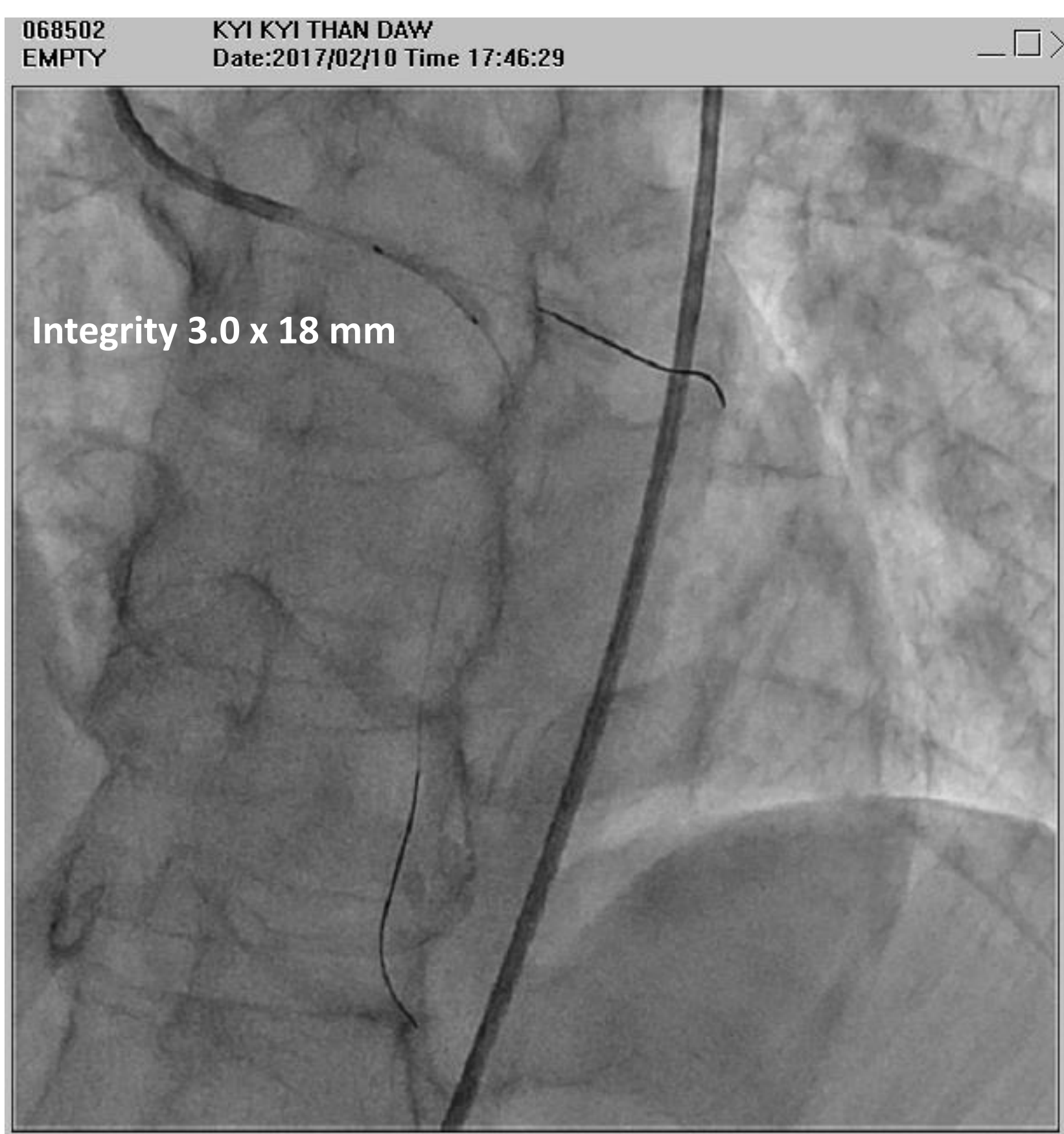


Figure (5) LM to LAD stenting

**Abbreviations**  
LM- Left Main  
LCX- Left Circumflex  
LAD- Left Anterior Descending  
YGH- Yangon General Hospital  
PCI- Percutaneous Coronary Intervention

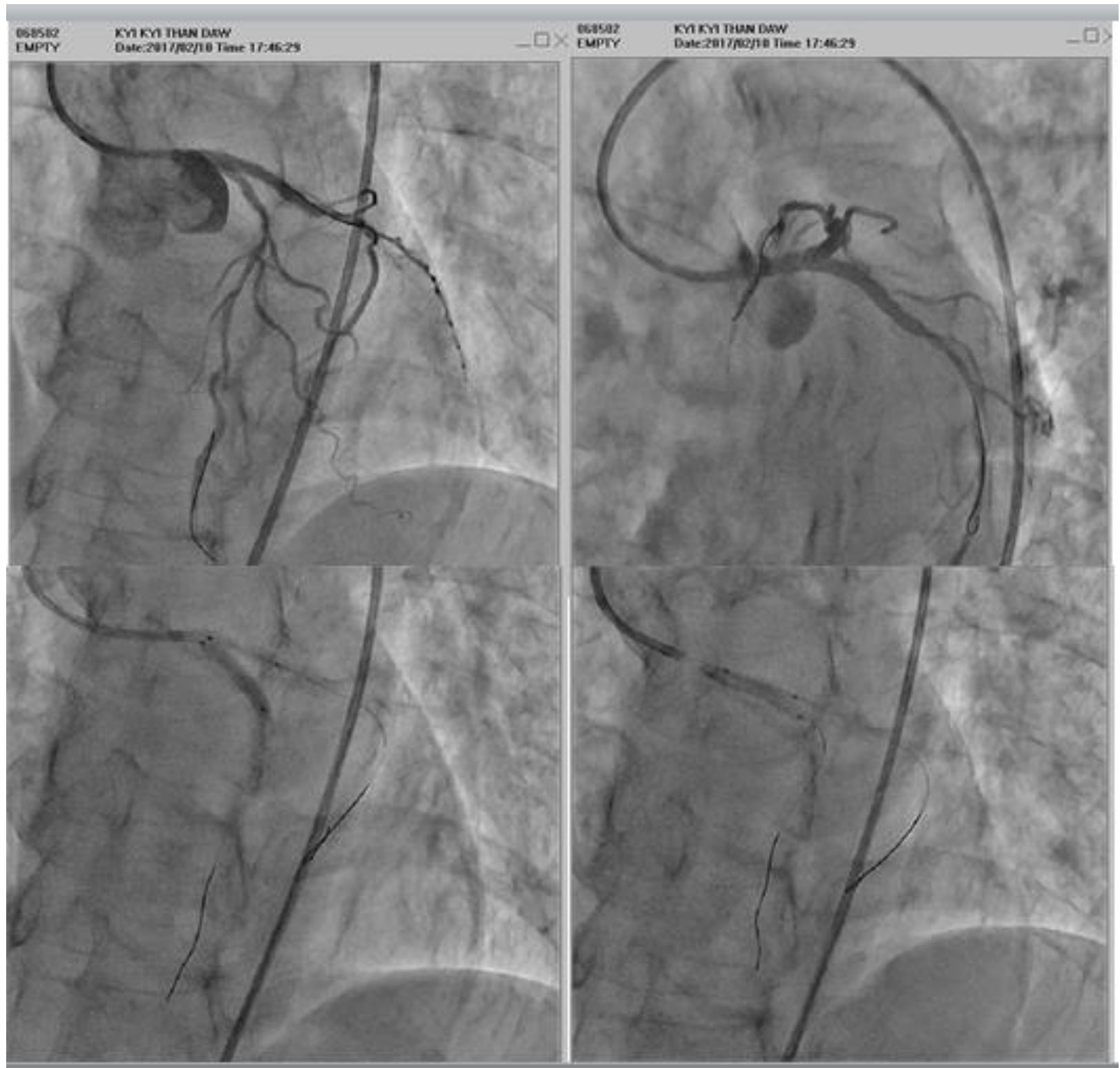


Figure (6) Kissing of LM to LCx and LM to LAD

The mid LAD lesion was then stented using a Prokinetic Energy 2.75x 22 mm after predilatation with Springer Legend 2.0 x 15 mm.  
Finally TIMI 3 of LAD was successfully attained with stable haemodynamic condition.

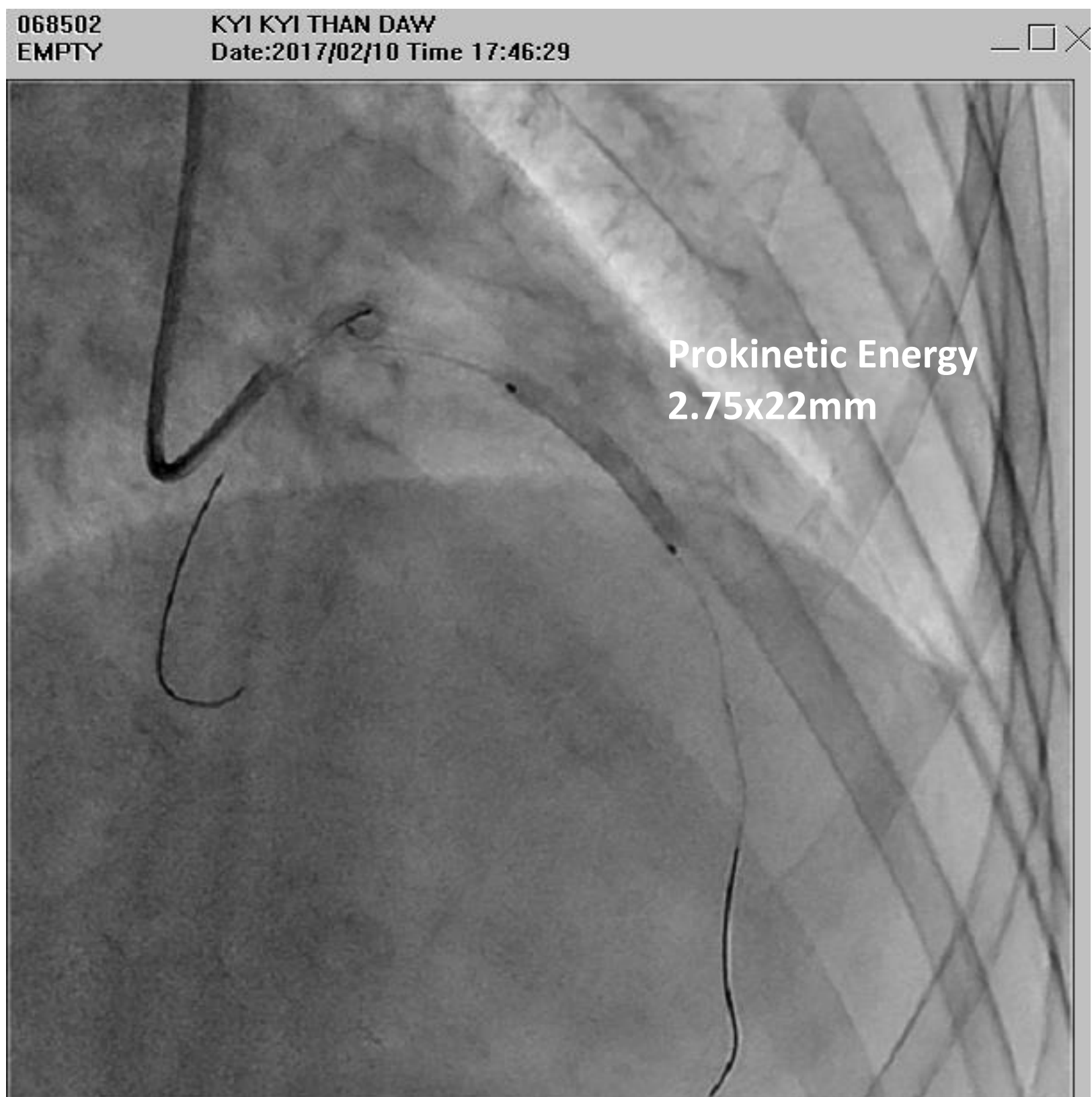


Figure (7) Mid LAD stenting



Figure (8) Final Results

Conclusion

LM dissection is a rare but potentially fatal complication of coronary intervention.  
Timely management is essential to save the life of the patient.