

Conclusion

The 3.0-mm BVS appears to be safe and effective in small vessels, with similar clinical and angiographic outcomes observed when compared with those of large vessels.



Left Main

International Journal of Cardiology

Letter to the Editor

First experience of a bioresorbable vascular scaffold implantation in left main stenosis

Diego Fernández, Salvatore Brugaletta *, Victoria Martín-Yuste, Ander Regueiro, Ana de Mingo, Alejandro Santos, Mónica Masotti, Manel Sabaté

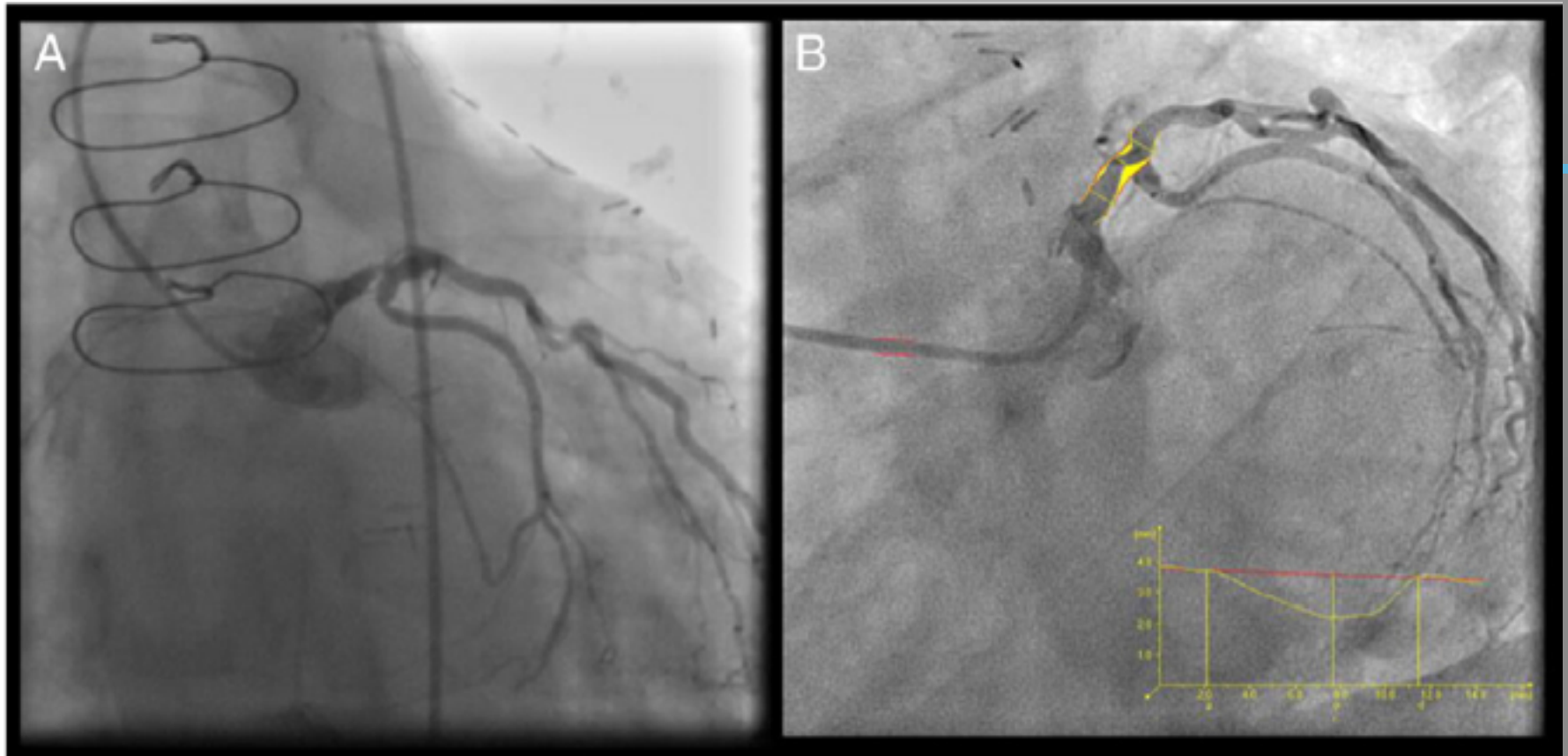
Thorax Institute, Hospital Clinic, University of Barcelona, IDIBAPS, Spain

Male, 56 yrs,

Diagnosis: NSTEMI

Past history: post -CABG, HTN, DM





Distal LM lesion (80%), CTO of ostial LAD, diffuse atheromatosis without ostial involvement of IA (main vessel) and LCx (side branch), forming a bifurcation lesion (Medina 1, 0, 0); and absence of significant lesions in IA and LCx.

Pre-procedural reference vessel disease of LM: 3.82-mm.



Table 3 Adverse Events at 6-Month Follow-Up

	Small Vessels (<2.5 mm; n = 41)	Large Vessels (≥2.5 mm; n = 60)	p Value
ID-MACE*	3/41 (7.3)	2/60 (3.3)	0.3933
Cardiac death	0/41 (0.0)	0/60 (0.0)	NA
MI	2/41 (4.9)	1/60 (1.7)	0.5645
QMI	0/41 (0.0)	0/60 (0.0)	NA
NQMI	2/41 (4.9)	1/60 (1.7)	0.5645
ID-TLR	1/41 (2.4)	1/60 (1.7)	1.0000
CABG	0/41 (0.0)	0/60 (0.0)	NA
PCI	1/41 (2.4)	1/60 (1.7)	1.0000
Non-ID-TLR	0/41 (0.0)	0/60 (0.0)	NA
CABG	0/41 (0.0)	0/60 (0.0)	NA
PCI	0/41 (0.0)	1/60 (1.7)	1.0000

A: Advance of a BMW guidewire (0.014×190) to distal IA through a 6F EBU 3.5 guide catheter

B: Pre-dilatation of distal LM and IA with a 3.0×12-mm TREK balloon at 14 atm

C: Implantation of BVS 3.5×18-mm at 14 atm (expected diameter:3.94-mm).

D: Final result with adequate stent expansion, absence of plaque shifting and preserved flow in IA and LCx.



Conclusion

- ▣ A 3.5-mm BVS can be implanted at 16 atm with an expected diameter of 4.0-mm
- ▣ The feasibility of BVS implantation in bifurcation lesions is demonstrated in case **no lesion is present at the ostium of the side branch**



Bifurcation

International Journal of Cardiology

Letter to the Editor

3-Dimensional reconstruction of a bifurcation lesion with double wire after implantation of a second generation everolimus-eluting bioresorbable vascular scaffold

Robert J. van Geuns¹, Bill D. Gogas¹, Vasim Farooq¹, Evelyn Regar, Patrick W. Serruys^{*}

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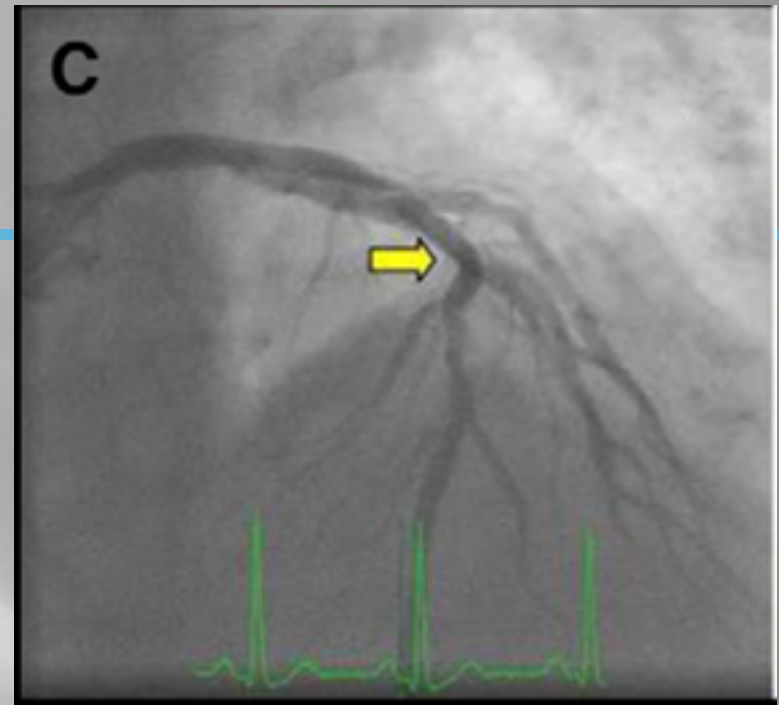
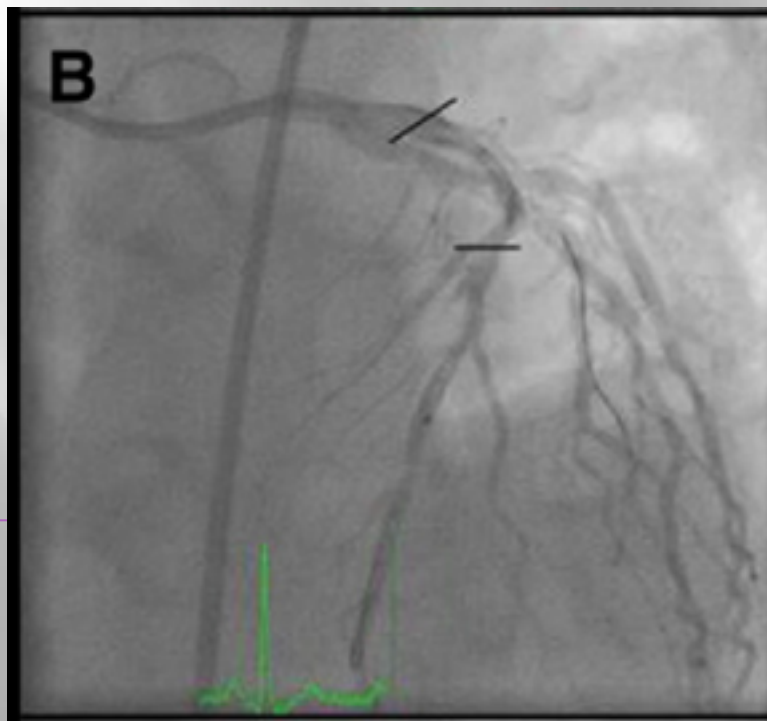
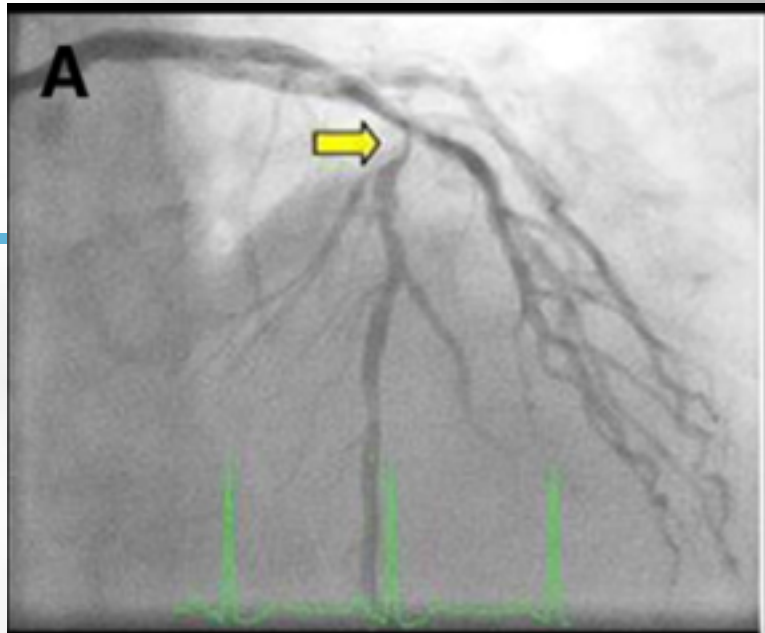
Male, 75 yrs

Past history: hypercholesterolemia

Diagnosis: acute coronary syndrome

Angiography: a significant (>50%) bifurcation lesion in the mid LAD, appearing not to involve the Side B (MEDINA classification 1,1,0).





A: The bifurcation lesion (yellow arrow)

B: The double wiring post scaffold implantation in the main branch across the diagonal branch

C: Final result.





JACC

JOURNAL of the AMERICAN COLLEGE of CARDIOLOGY



IMAGES IN INTERVENTION

Three-Dimensional Reconstruction of the Post-Dilated ABSORB Everolimus-Eluting Bioresorbable Vascular Scaffold in a True Bifurcation Lesion for Flow Restoration

Bill D. Gogas, MD, Robert J. van Geuns, MD, PhD, Vasim Farooq, MBChB,
Evelyn Regar, MD, PhD, Jung Ho Heo, MD, Jurgen Ligthart, BSc,
Patrick W. Serruys, MD, PhD

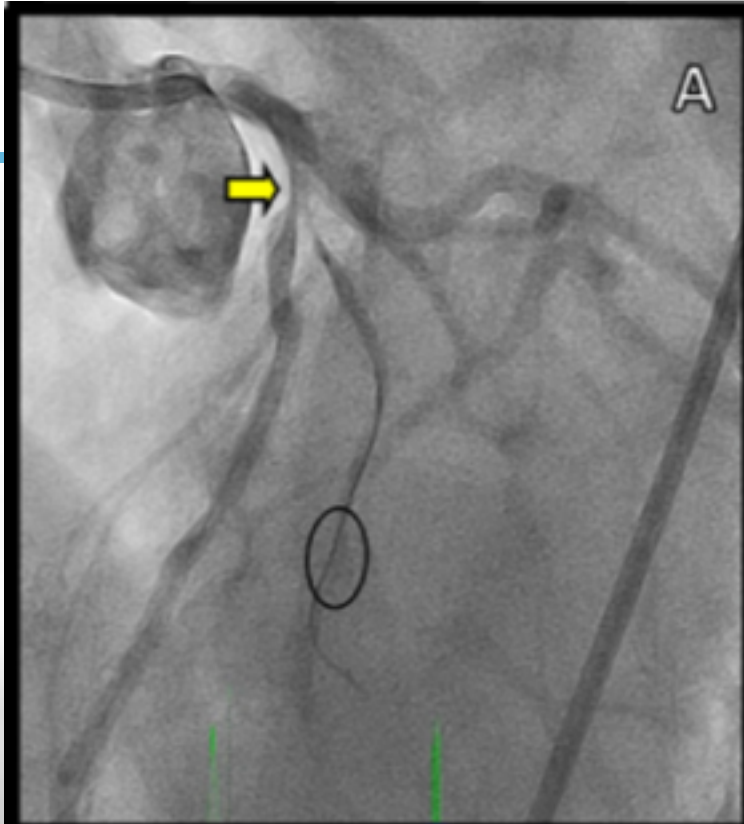
Rotterdam, the Netherlands

Male, 68yrs

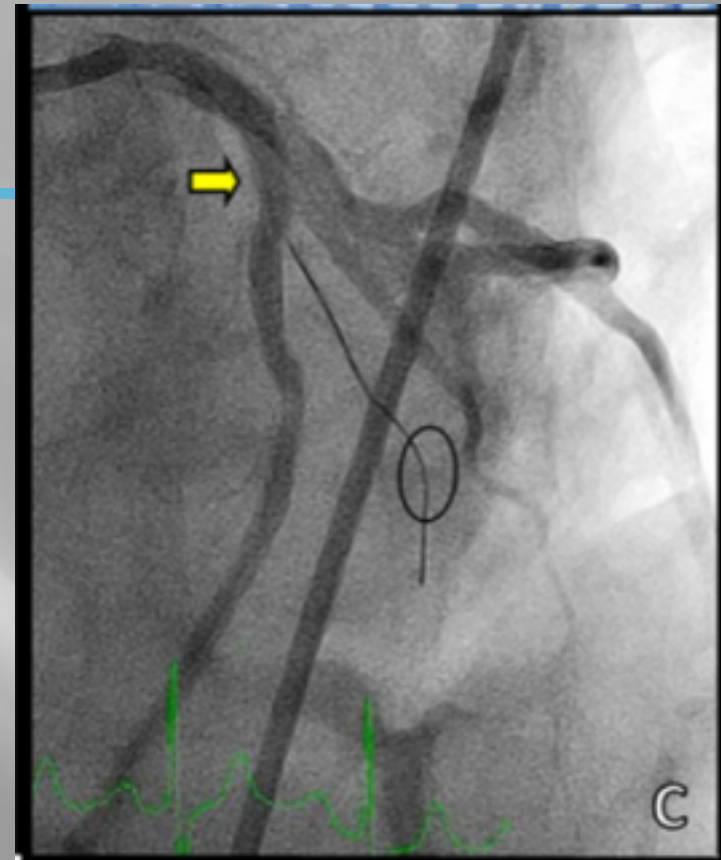
Diagnosis:NSTEMI

Angiography: a significant true bifurcation lesion in the mid LAD,appearing to involve the D2 (Side B), measuring 1.7 mm in maximal diameter (Medina classification: 1, 1, 1).



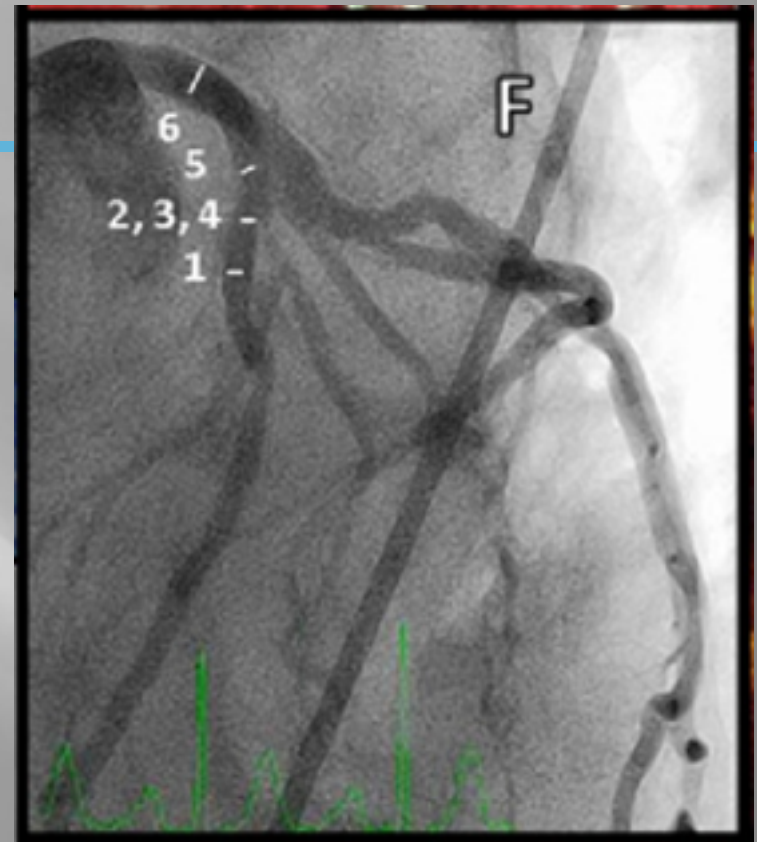
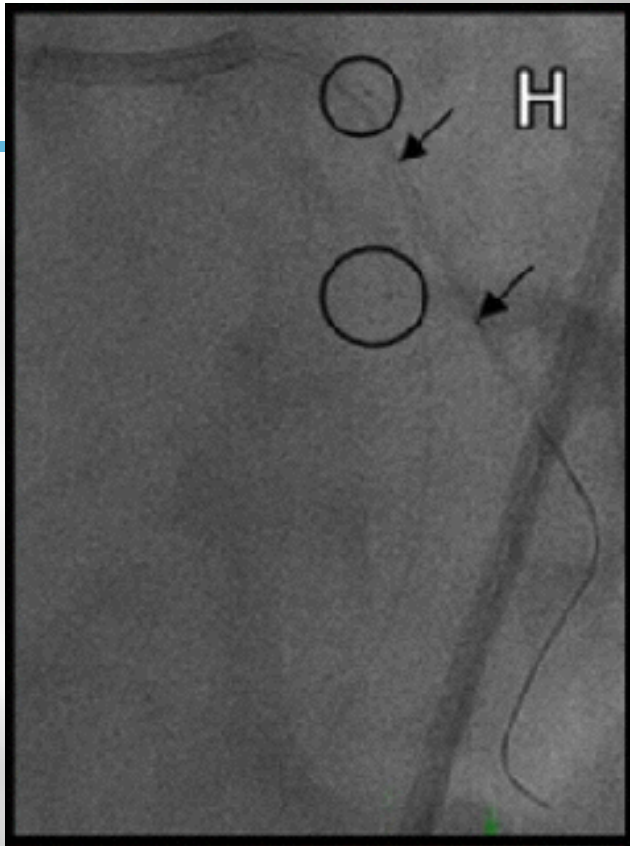


Both the main branch (Main B) lesion and the Side B were crossed with 0.014-inch Hi-Torque Pilot guidewires.



Implantation of a single 3.0*18-mm BVS in LAD across D2 opening was undertaken with nominal inflation pressures. TIMI1 immediately became evident at D2 with angiographic evidence of pinching of the ostium





A 1.5*12 mm Trek-compliant balloon was subsequently used to cross the cells of BVS toward the Side B and post-dilation of D2 was undertaken.

Restoration of TIMI 3 without significant myocardial damage.



**Looking Forward to Other
Off-label Use of BVS
in Complicated Coronary Diseases...
Experiences from Macao**



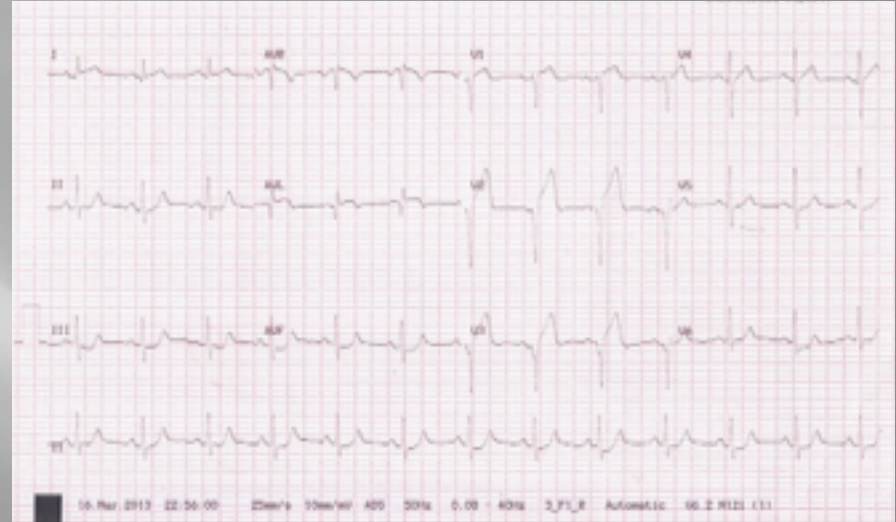
CASE 1 : AMI

Male.58yrs; Chest pain for 6hrs..

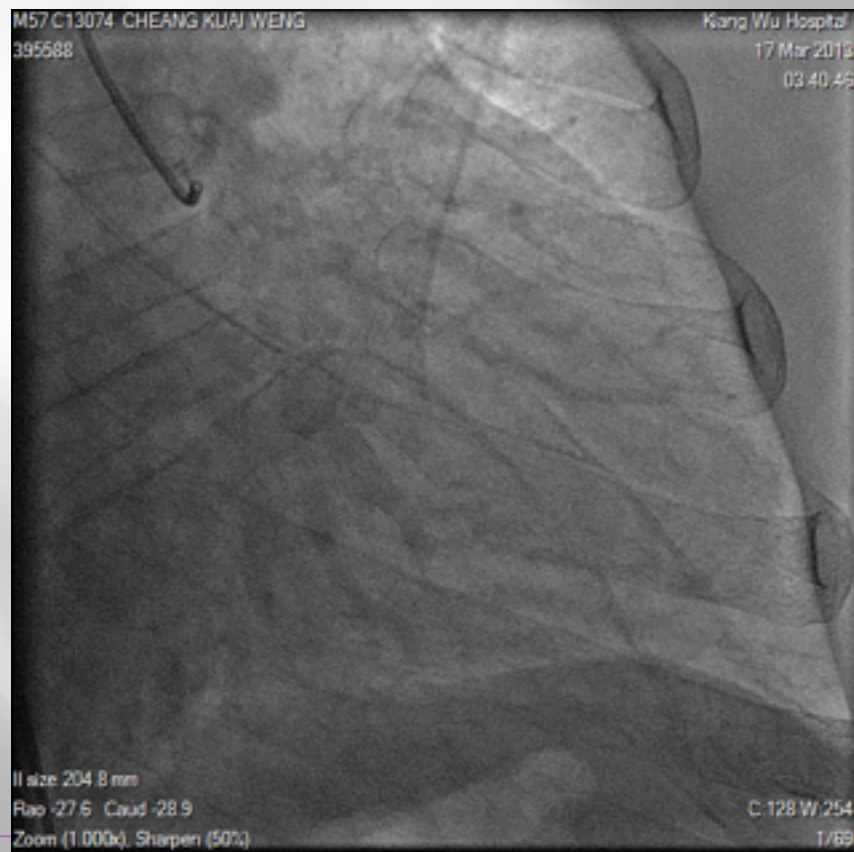
High Risk: Hypertension
UCG:EF52%,Slightly thinner in the ventricular septal and apical wall

TnT (>10ng/ml) and
CK-MB(>307.4ng/ml)
elevated

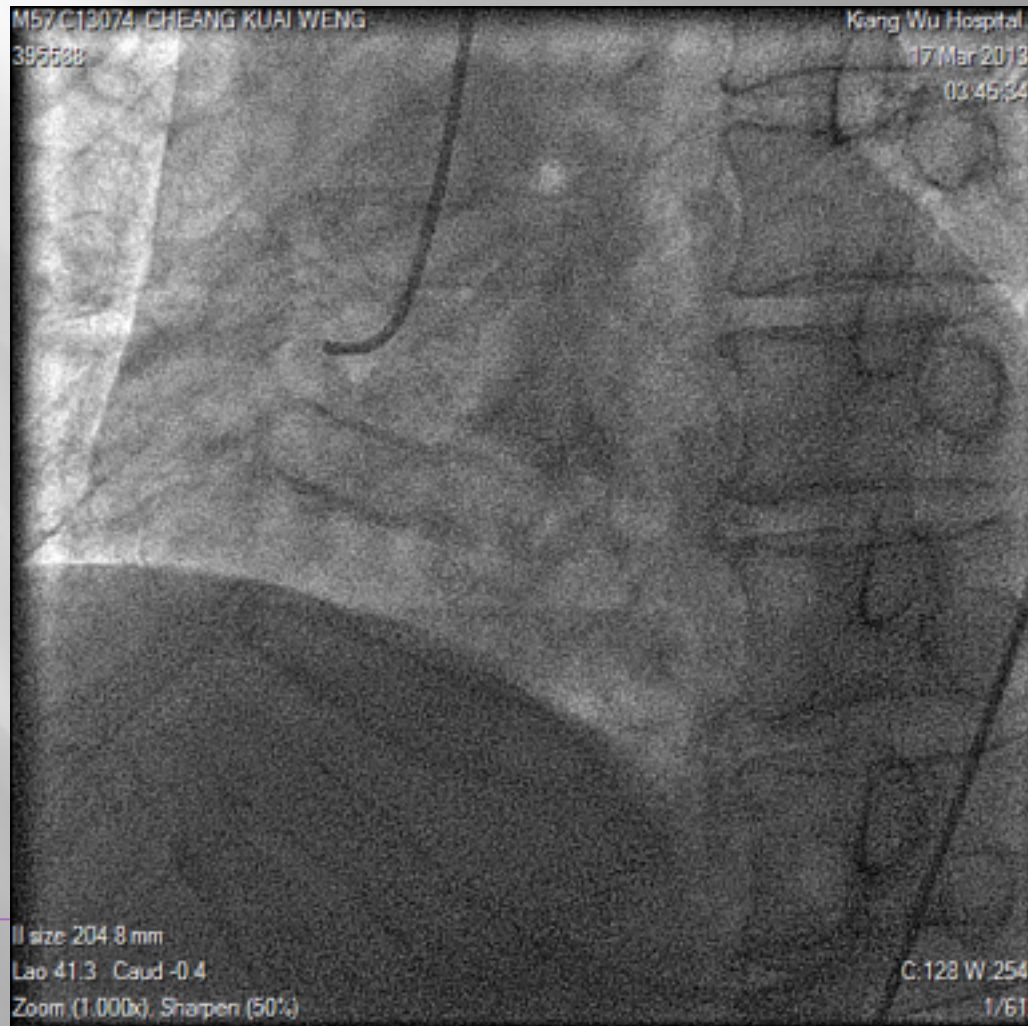
Diagnosis: STEMI



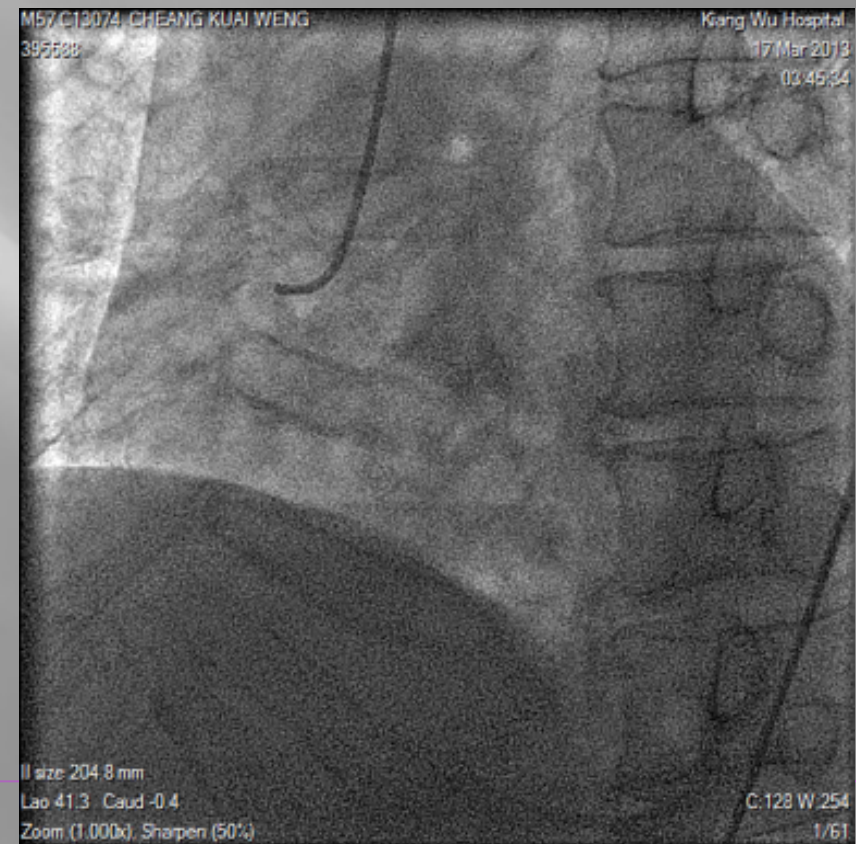
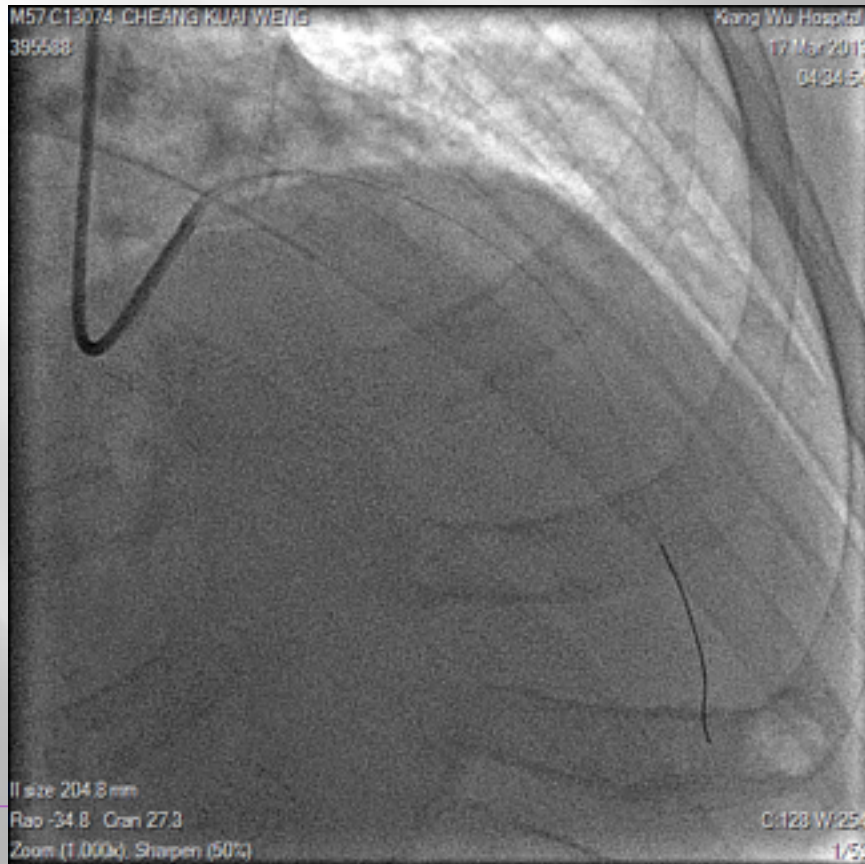
Case 1 : AMI (Pre)



Case 1 : AMI (Pre)



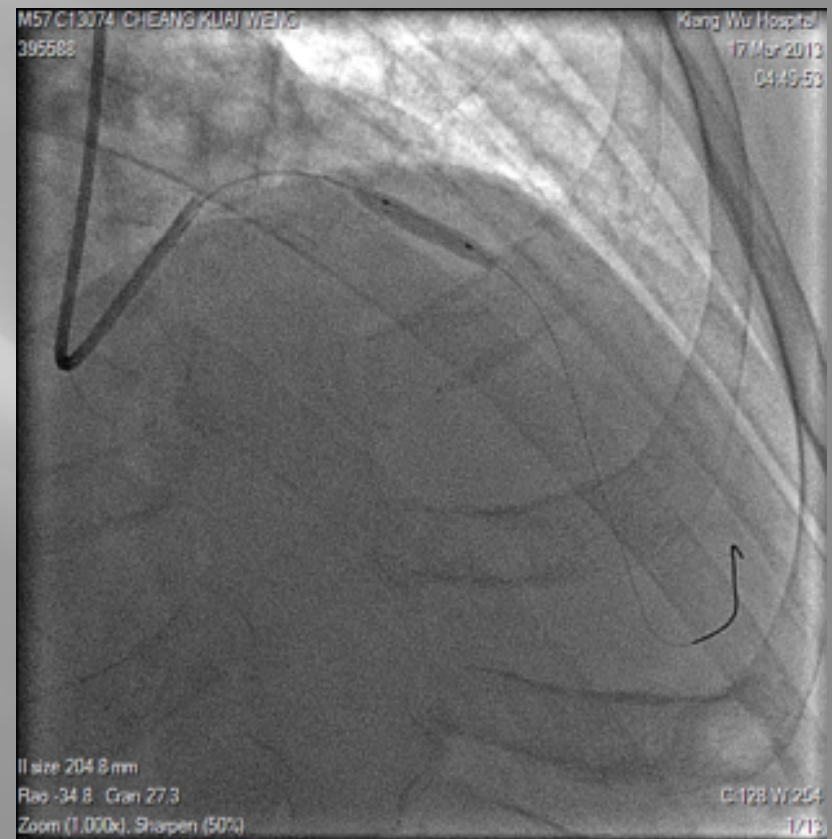
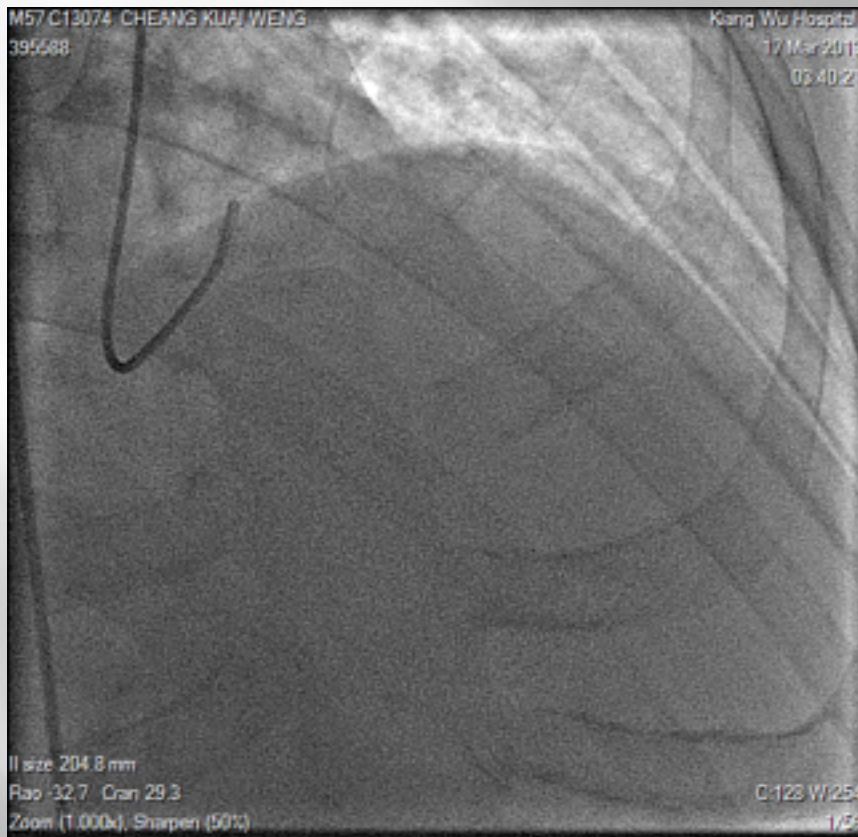
Case 1 : AMI (Pre)



6Fr.EBU 3.75; Runthrough NS wire; pre-dilated with Balloon 2.5*15mm



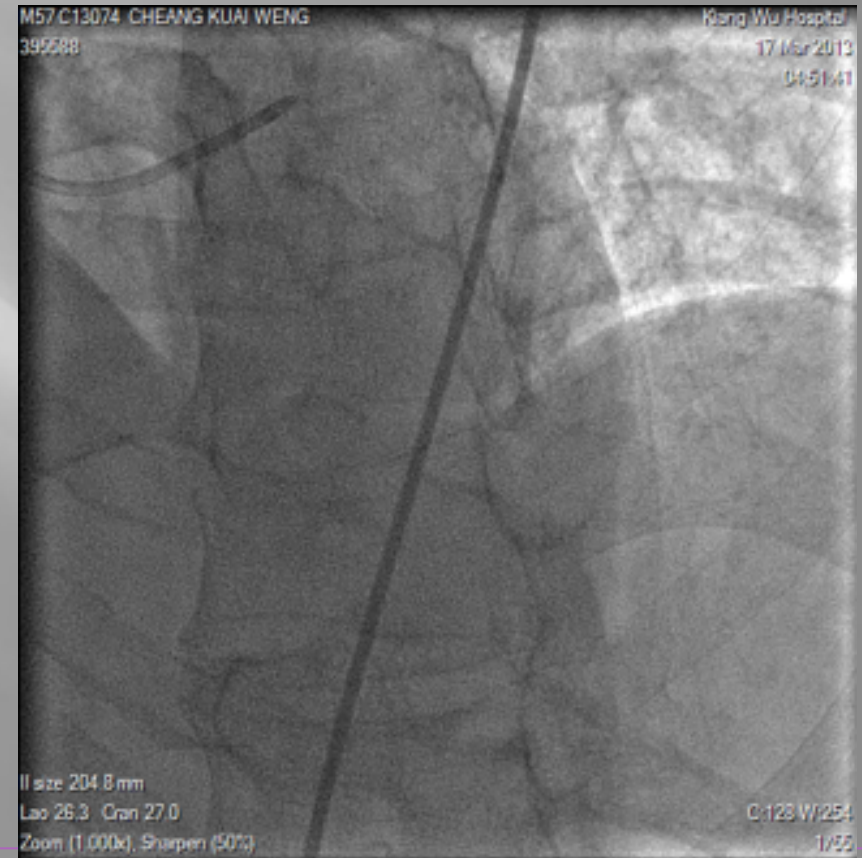
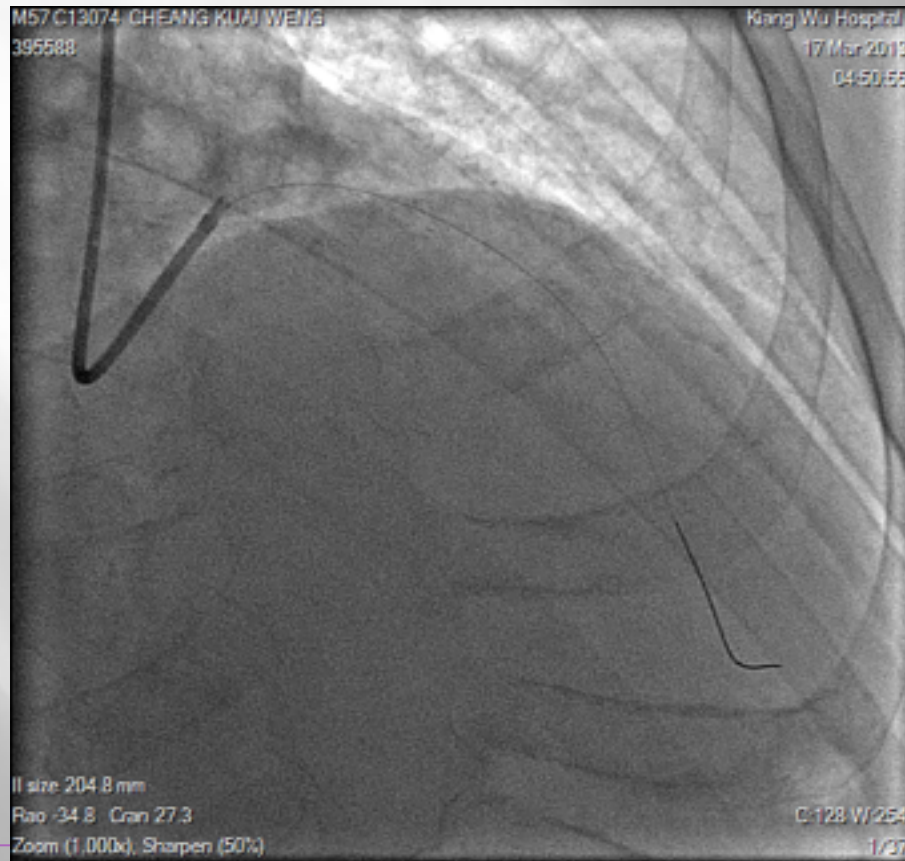
Case 1 : AMI (PCI)



Two Absorb Stents(3.0*18mm overlapping 3.5*12mm)



Case 1 : AMI (Post)



CASE 2: Bifurcation

Male, 53yrs, Recurrent chest pain 30days.

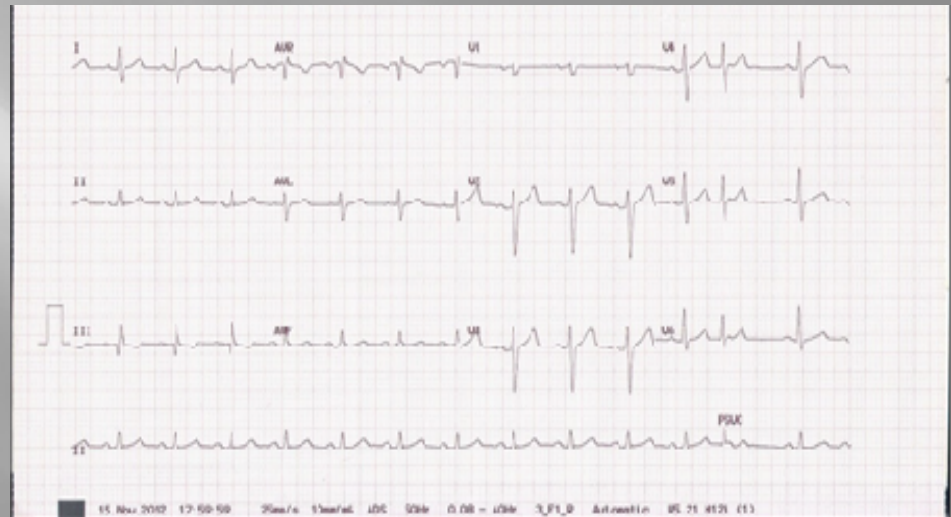
High risk:

Hyperlipedeamia

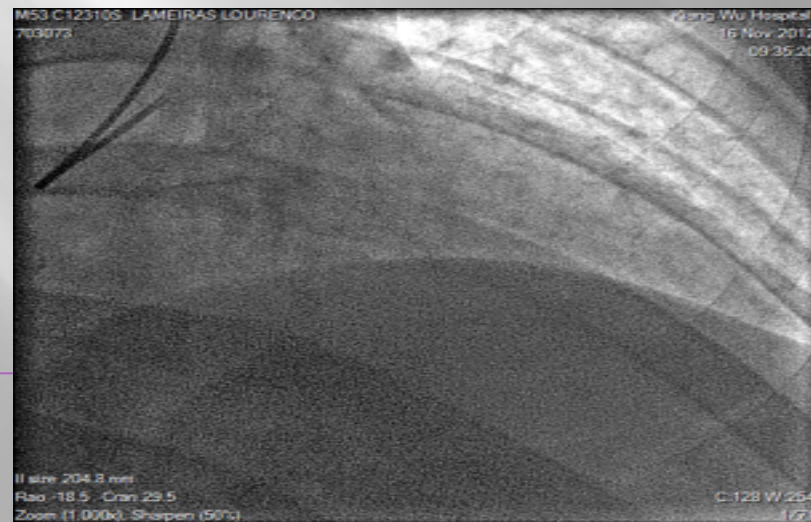
UCG:EF%, lower of interventricular septum hypokinesis.

TnT and CK-MB normal

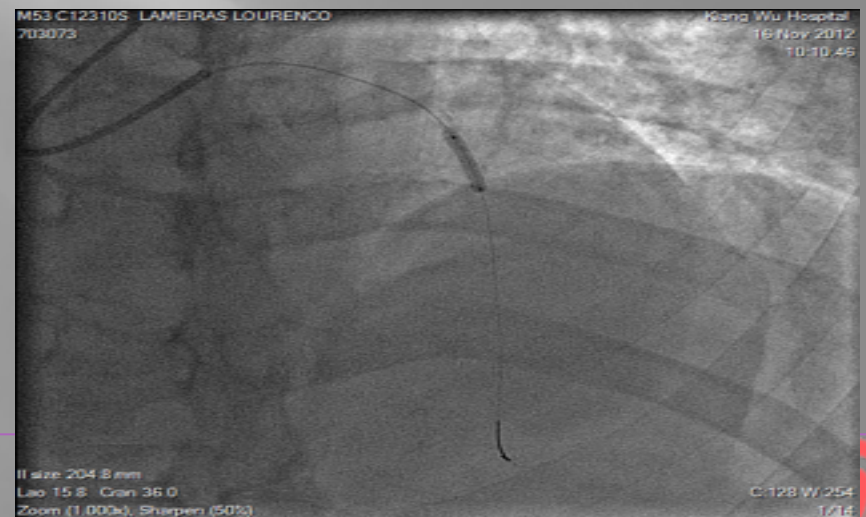
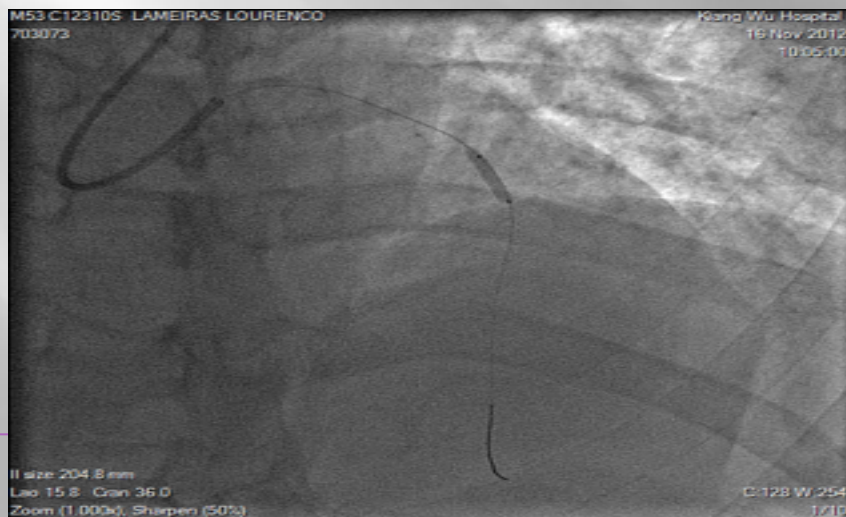
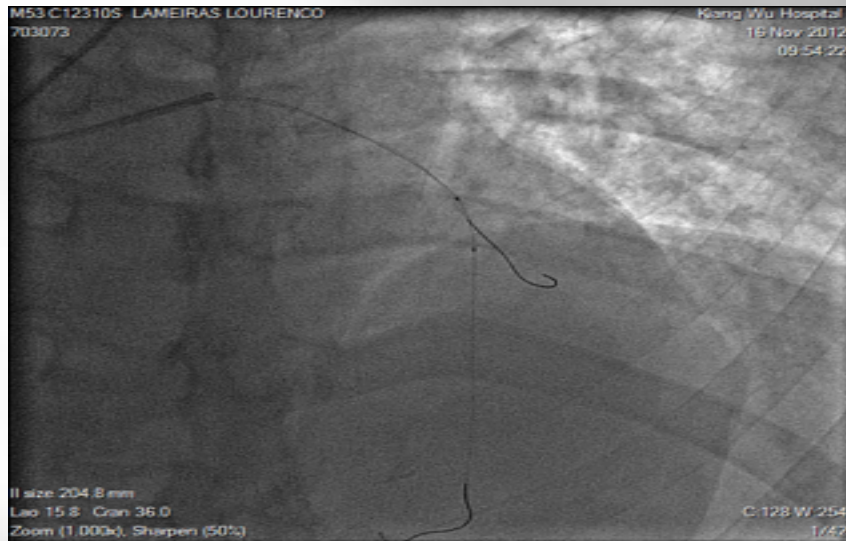
Diagnosis: Unstable AP



CASE 2: Bifurcation (Pre)



CASE 2: Bifurcation (PCI)



6Fr. BL 3.5; Runthrough wire; pre-dilated with balloon 2.0*15mm and 2.75*15