

COMPLEX PCI 2020 Virtual PCI of Calcified ULMCA Disease

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DISCLOSURE

- None

CASE PREVIEW

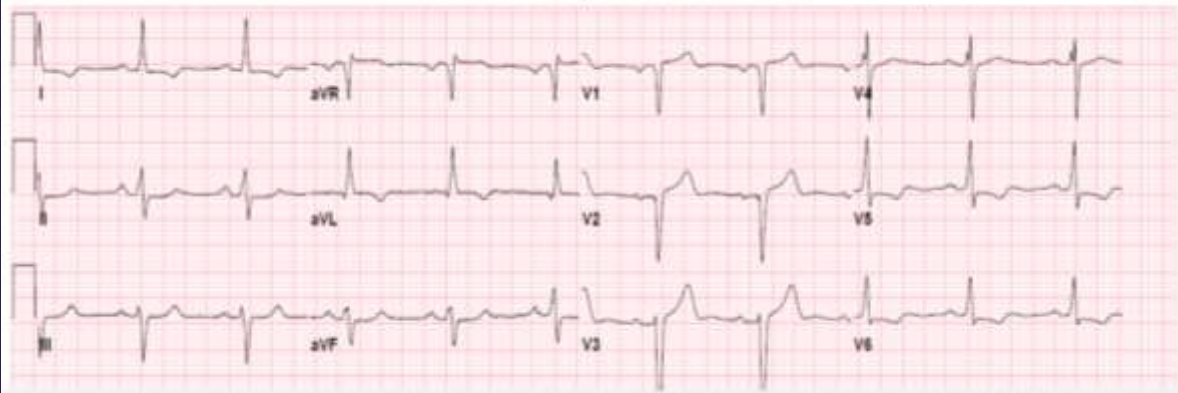
- 62-year-old male with diabetes, hypertension, hyperlipidemia, active smoker, PAD s/p left BKA, ischemic cardiomyopathy (EF 35%), presented with unstable angina and shortness of breath

ID:006074113 11-AUG-2020 09:46:55 WESTWOOD-TRNCOU ROUTINE RETRIEVAL

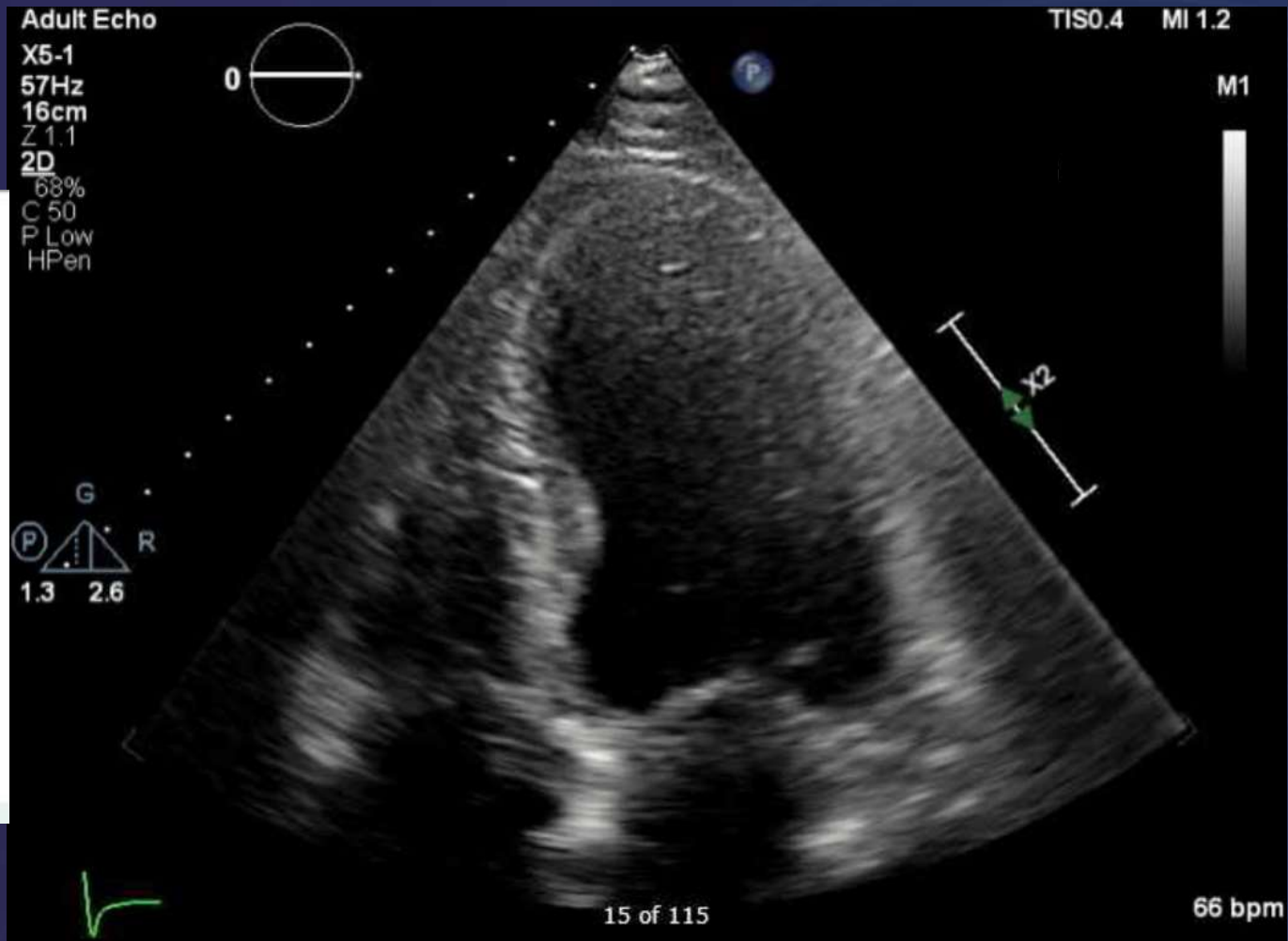
21-JUL-1958 (62 yr)	Vent. rate	63	BPM	Sinus rhythm
Male	PR interval	193	ms	Anteroseptal infarct, old
Room W7641	QRS duration	114	ms	Repol abnorm suggests ischemia, lateral leads
Loc:223	QT/QTc	426/437	ms	Abnormal ECG
	P-R-T axes	54 -17 132		

Technician:
Test ind:

Referred by: MICHAEL LEE



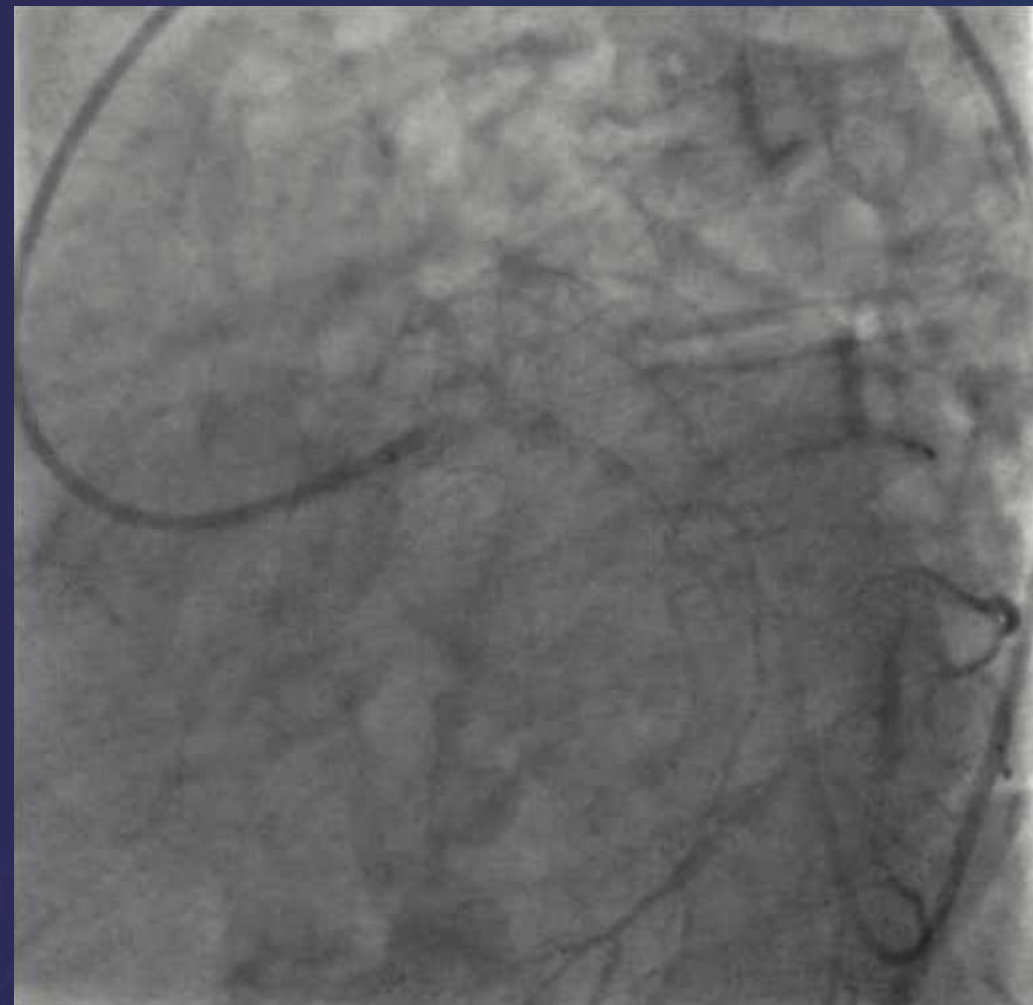
Adult Echo
X5-1
57Hz
16cm
Z 1.1
2D
68%
C 50
P Low
HPen



ANGIOGRAPHY



ANGIOGRAPHY



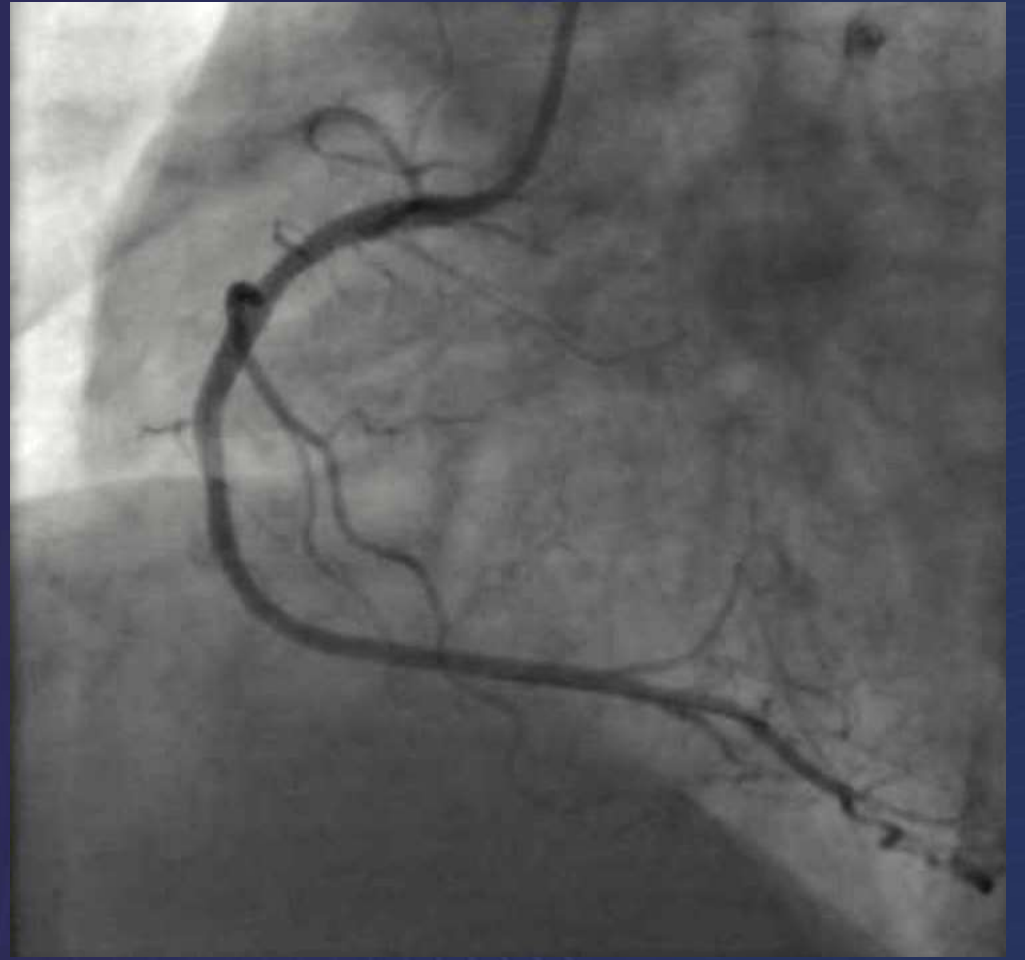
Peripheral Angiography of SFA



DISCUSSION I

- Diabetic patient with LV dysfunction and multivessel disease including LM disease
- Patient deemed to be a non-surgical candidate due to poor distal LAD target
- Mechanical circulatory support device not an option given severe PAD
- Severe coronary artery calcification
- Distal bifurcation disease of the ULMCA

PCI of RCA



3.5x28 mm and 4.0x38 mm Xience stents

PCI of distal LM Bifurcation with Orbital Atherectomy and DK Crush Technique



Orbital atherectomy with 1.25 mm crown at low (80,000 rpm) and high-speed (120,000 rpm)



PCI of distal LM Bifurcation with Orbital Atherectomy and DK Crush Technique



Predilate LAD with 3.25x20 mm balloon



3.25x23 mm Xience

PCI of distal LM Bifurcation with Orbital Atherectomy and DK Crush Technique

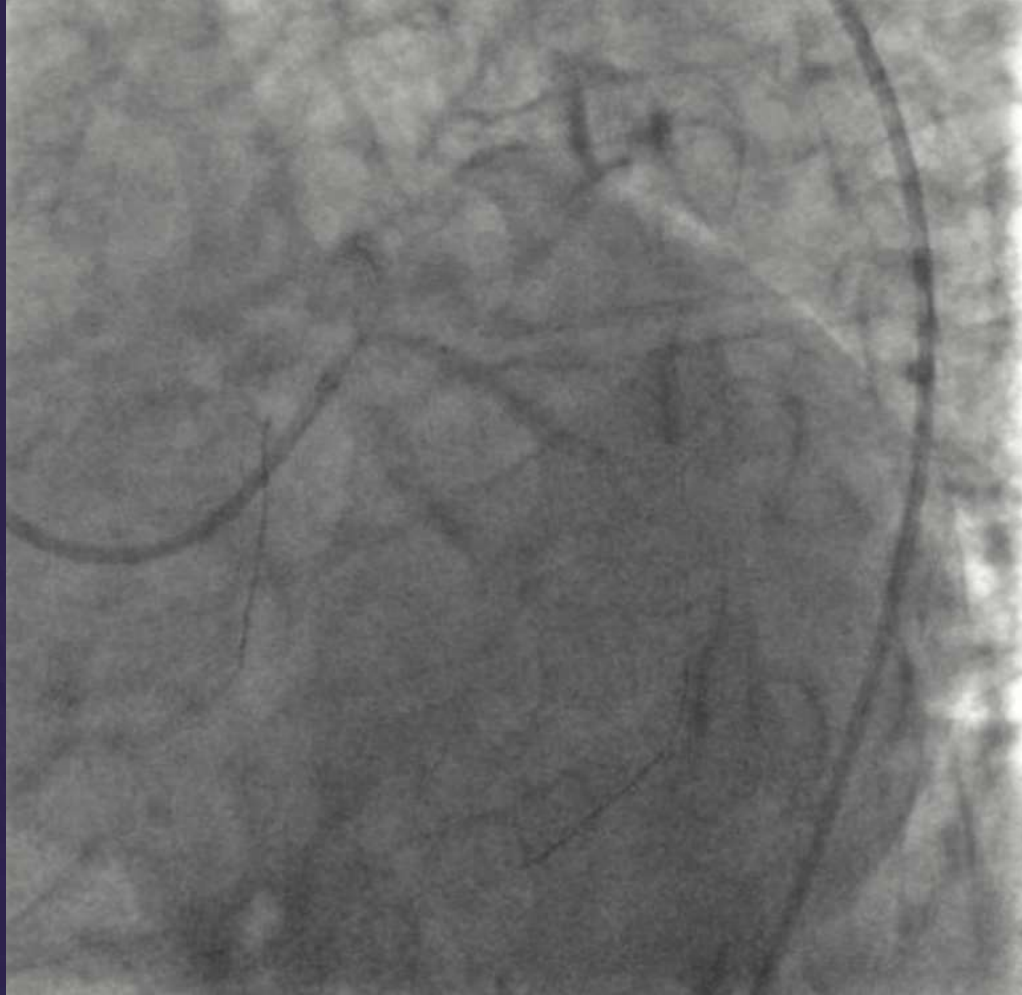


Predilate LAD with 3.25x20 mm balloon



3.25x23 mm Xience

PCI of distal LM Bifurcation with Orbital Atherectomy and DK Crush Technique

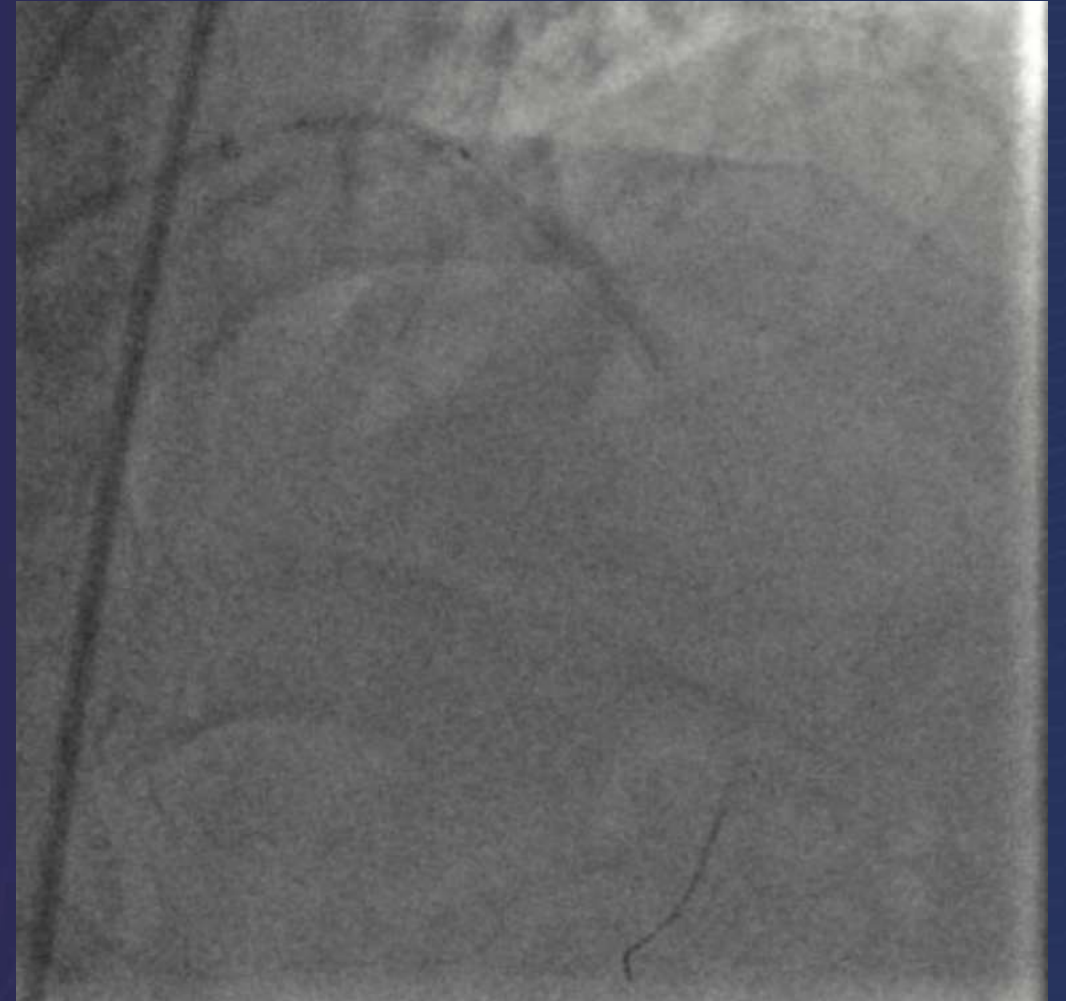


Predilate LCX with 2.75x20 mm balloon
Hemodynamic collapse requiring phenylephrine 200 mcg
and dopamine

PCI of distal LM Bifurcation with Orbital Atherectomy and DK Crush Technique



After 3.25x28 mm Xience in the ostial LCX,
first kissing balloon angioplasty performed



4.0x18 mm Xience in the LM

PCI of distal LM Bifurcation with Orbital Atherectomy and DK Crush Technique

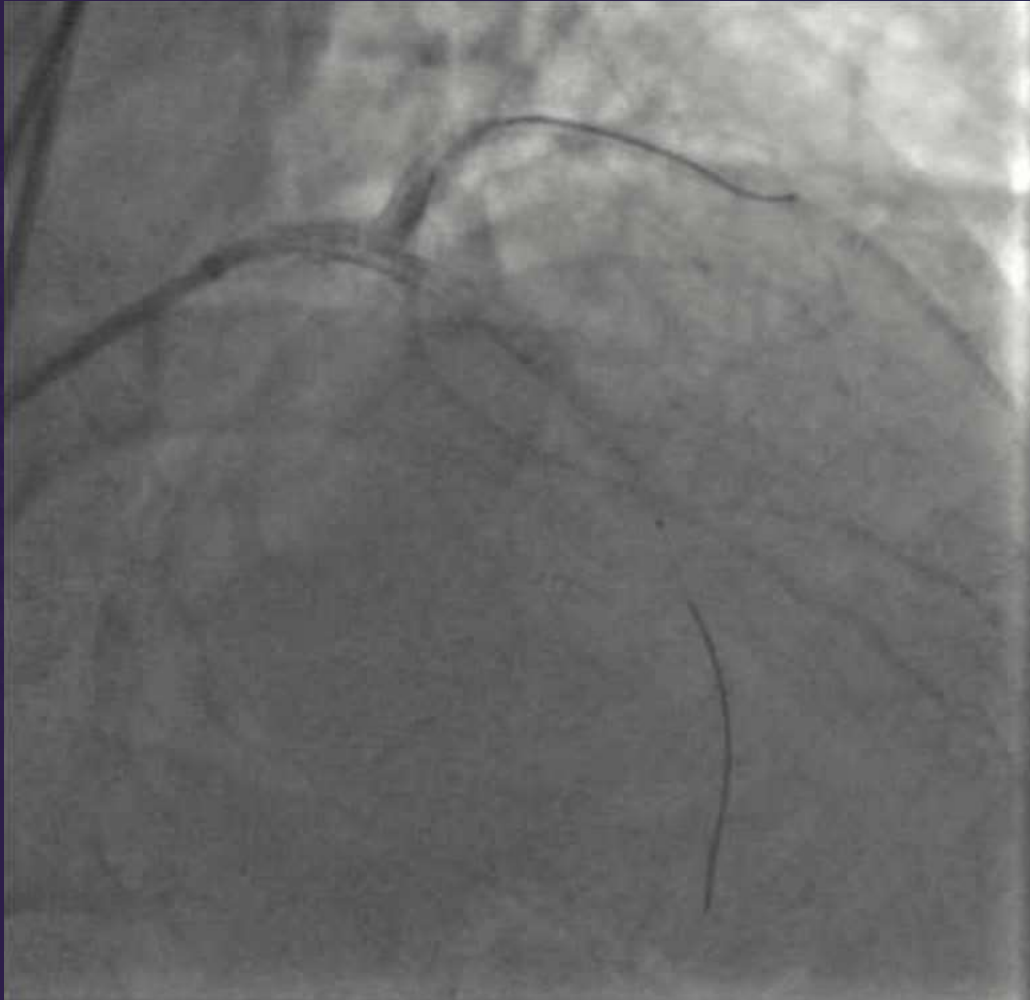


Angiography after LM stent

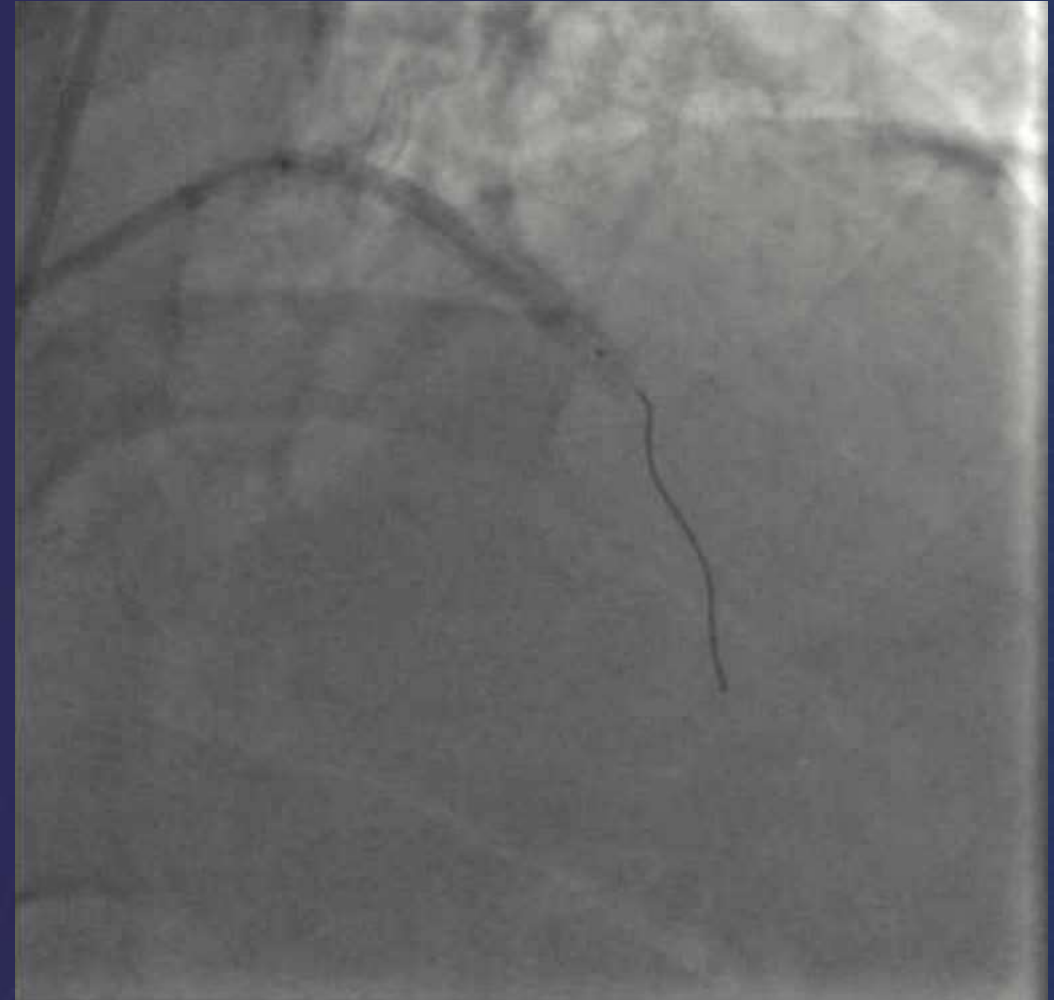


Second kissing balloon inflation:
4.0x15 NC in LM and 3.5x15 mm NC in LCX

PCI of distal LM Bifurcation with Orbital Atherectomy and DK Crush Technique

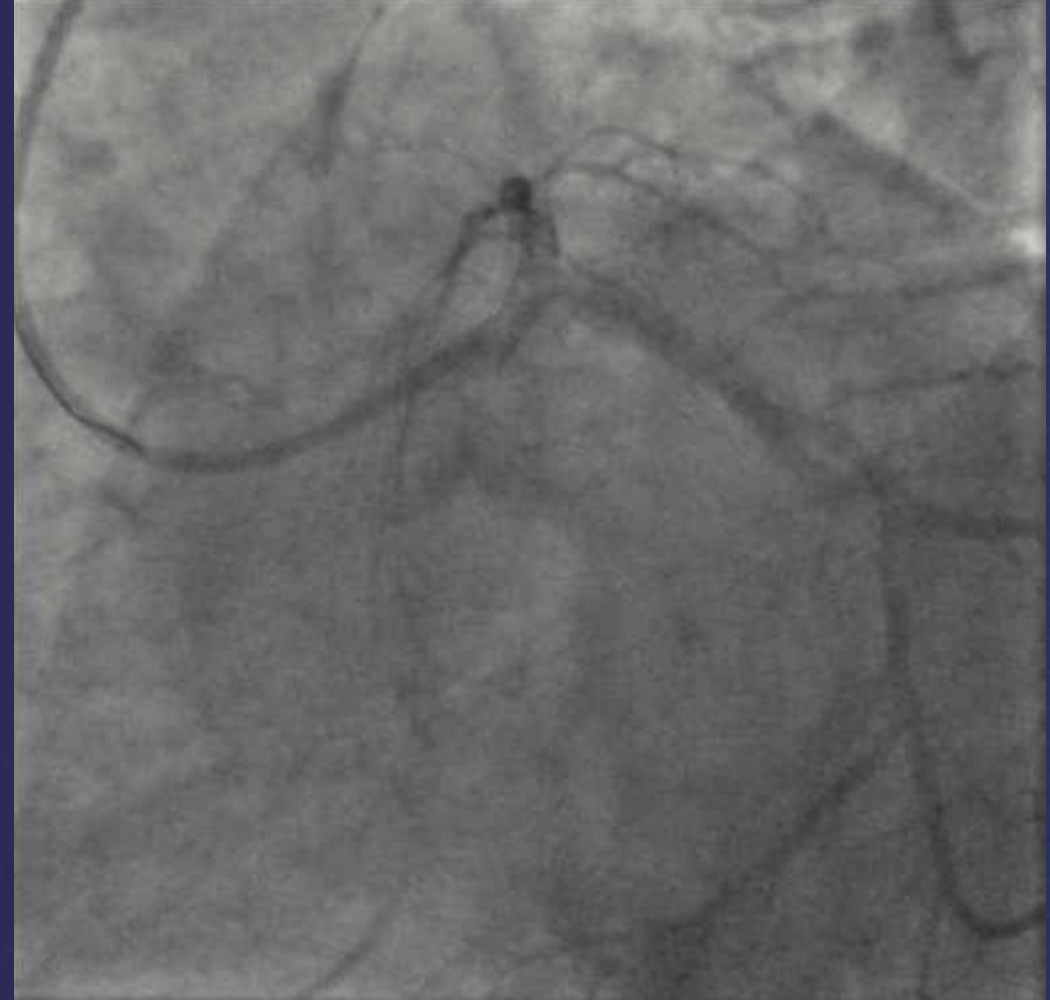


Angiography during OCT



3.5x40 mm Shockwave Intravascular Lithotripsy
for stent under-expansion in the LAD

PCI of distal LM Bifurcation with Orbital Atherectomy and DK Crush Technique



Final angiography

DISCUSSION II

- Complex, severely calcified multivessel disease involving the ULMCA
- Mechanical circulatory support device

DISCUSSION III

- Plaque modification with orbital atherectomy can be performed in complex, calcified ULMCA disease
- Patients with LV dysfunction who undergo complex PCI but are not ideal candidates for mechanical circulatory support device represent a very high-risk group.
- Vasopressors should be immediately available in case patients experience sudden hemodynamic collapse