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Conclusions. 1. The Biplane angiography allows you to position the stent in coronary arteries simultaneously in two projections: along the distal and proximal mark of the stent.

2. Biplane does the one-time visualization of coronary arteries in two projections. But "does BIPLANE significantly decrease of contrast amount?" or "is there any difference in procedure times?" is subject to a further randomized trial.

3. BIPLANE coronary angiography and PCI are useful for simple or complicated cases. It is an important step in training specialists on simple cases first to be ready for more complicated situations.

TCTAP C-033

CHIP - Choice OR Only Option...!! For Complicated Post Covid Case With Severely Calcified LM Trifurcation Lesion



Harsimran Singh,¹ Nagendra Boopathy Senguttuvan,¹ Ramesh Sankaran,¹ Vinod Kumar Balakrishnan,¹ S. Sadhanandham,¹ Venkata Balasubramaniyan Jayanty,¹ Preetam Krishnamurthy,¹ Manokar Panchanatham,¹ Thoddi Ramamurthy Muralidharan¹
¹Sri Ramachandra Institute of Higher Education and Research, India

CLINICAL INFORMATION

Patient Initials or Identifier Number. 2751019

Relevant Clinical History and Physical Exam. A 79-year-old-male was admitted with fever and cough in desaturated state. He was diagnosed with COVID-19 (RT-PCR +), and was managed conservatively as per standard protocol. He developed acute pulmonary edema after 14 days of his illness. Developed hypotension and was started on inotropes. Diagnosed with evolved AWMI (KILIPS class III on mechanical ventilator). Repeat COVID-19 test was negative.

Known- DM II, Hypertension, AKI
 BP- 100/70 mmHg (on support) HR-100/Minute
 CVS- S1S2S3+
 RS- B/L crepitation +

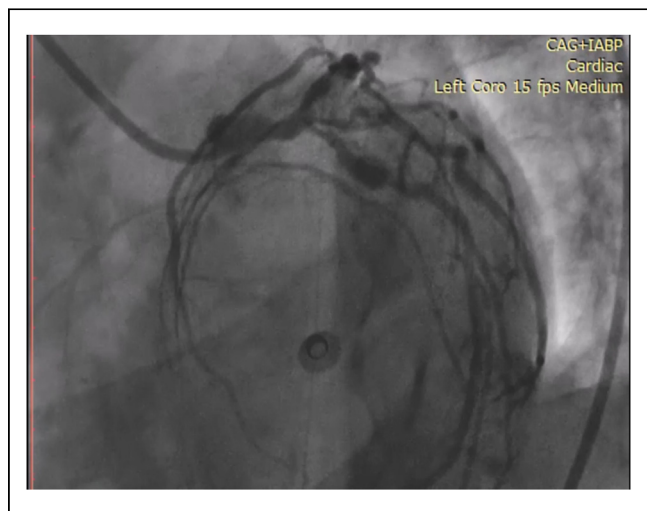
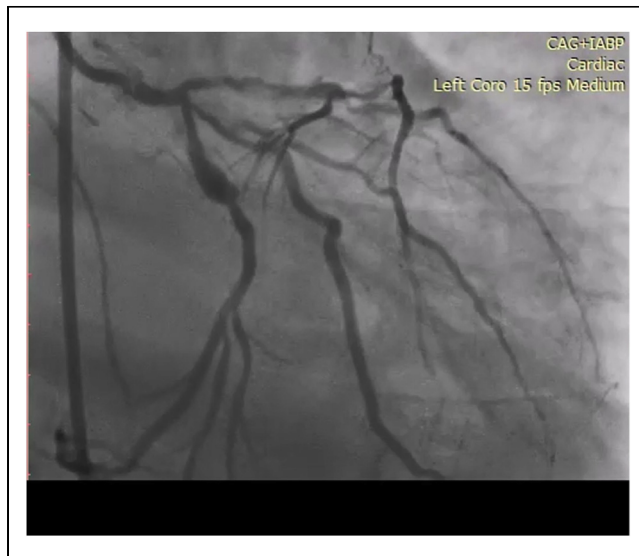
Relevant Test Results Prior to Catheterization. ECG- Q wave in V2-V5 with ST Elevation

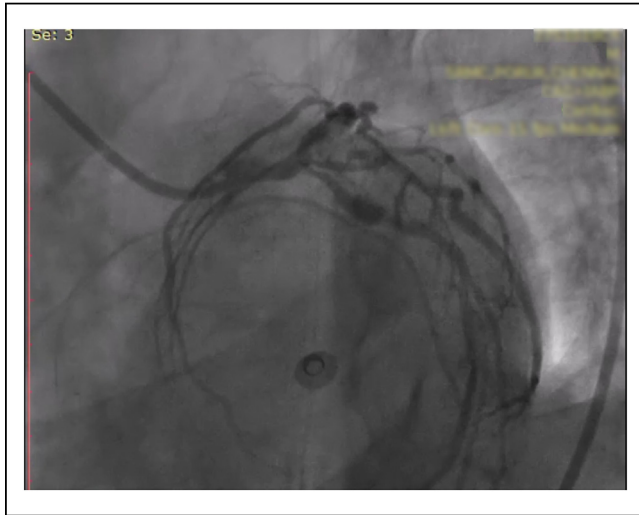
2D TTE- Severe LV dysfunction (EF-30%) with grade I diastolic dysfunction. Severely hypokinetic LAD territory.

Trop I- 8.9 ng/ml
 NTproBNP- 8110 pg/ml
 Hb - 10.8 gm/dl
 TC- 11200 cells/mcL
 Platelets- 2.5 lakhs
 BUN- 64 mg/dl
 Creatinine- 1.3 mg/dl

CT Thorax- B/L moderate pleural effusion (right>left) with minimal consolidation on right side.

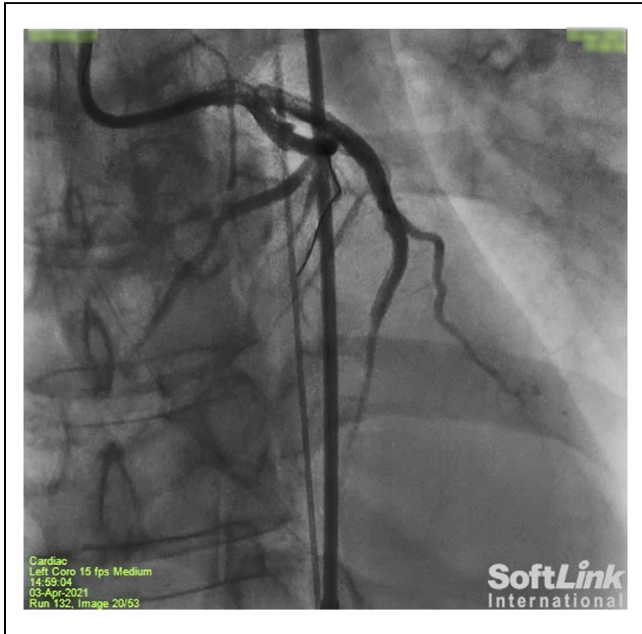
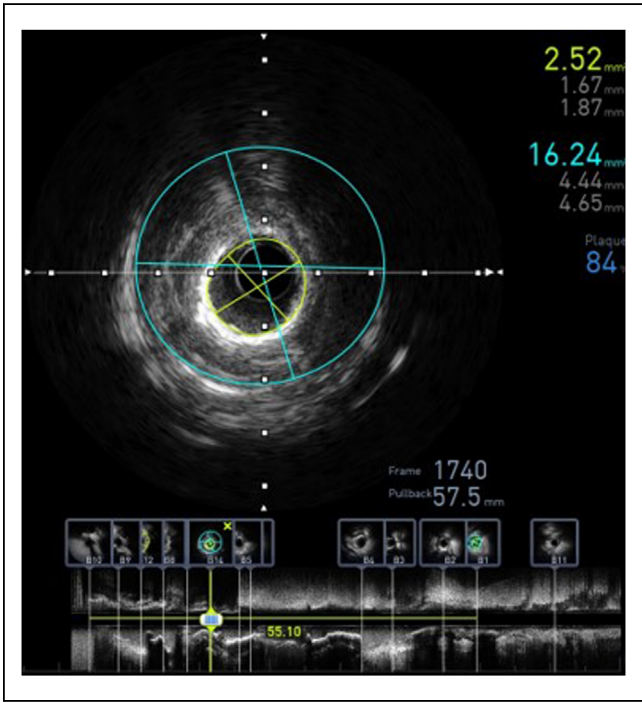
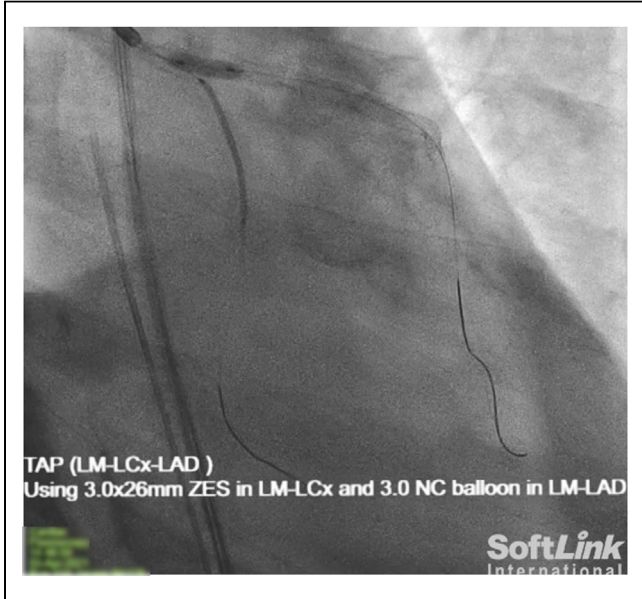
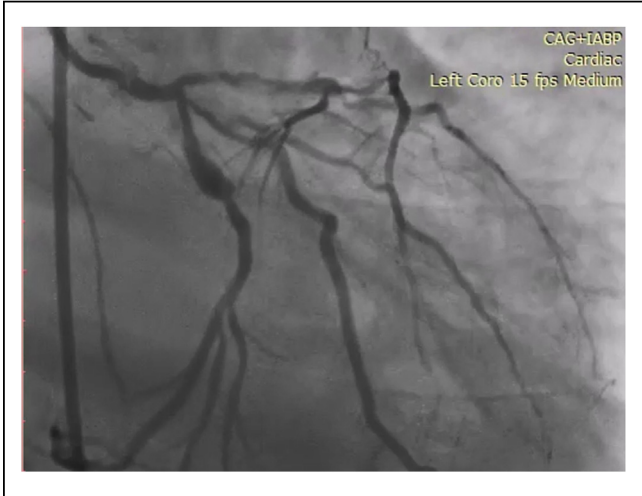
Relevant Catheterization Findings. Coronary Angiogram - Densely calcified - Distal LM had 50-60% stenosis. LAD had long segment lesion extending from ostial to mid segment with maximum severity of 90-95%. Ramus intermedius has ostial 90% lesion. LCX was a dominant vessel with 80-90% ostial lesion. RCA has 70-80% ostio-proximal lesion.





INTERVENTIONAL MANAGEMENT

Procedural Step. -Lt. femoral artery cannulated with 7F long sheath
 -IABP placed through rt. femoral artery
 -TPI through RT. femoral vein
 -With 7F 3.5 EBU (Terumo, Japan) guiding Lt. coronary artery hooked
 -Using Finecross microcatheter (Terumo, Japan) Runthrough wire (Terumo, Japan) exchanged with Grand Slam wire (Asahi, Japan)
 -Predilatation in LAD using 1.5x10 mm Ryurei balloon (Terumo, Japan) f/b 2x10 mm Apollo balloon (BrosMed, China)
 -IVUS done
 -I/V/O densely calcified vessel predilatation with 2.5x10 mm Accuforce (Terumo, Japan) balloon followed by IVL with shockwave C2 3X12 mm balloon (Shockwave Medical, USA)
 -Prepare LCX with 2x10 mm Ryurei balloon (Terumo, Japan) f/b 3x10 mm OPN balloon (SIS Medical, Switzerland)
 -LAD stented with 2.75x30 mm Resolute DES (Medtronic, USA) and 3.5x38 mm Resolute DES
 -Ostial flaring done with same stent balloon using modified Tzabo wire technique (Terumo, Japan)
 -POT to LM done using 4.5x6 mm Accuforce balloon (Terumo, Japan)
 -BMW (Abbot, USA) wire recrossed in LCX
 -POBA to RI done using 2.5x15 mm Tazuna balloon (Terumo, Japan)
 -LCX predilated with 2.5x 12 mm Accuforce balloon (Terumo, Japan)
 -LAD post dilated with 3x10 mm apollo balloon (BrosMed, China). Same balloon placed in LM to LAD area and 3x26 mm resolute DES was kept in the ostial LCX with one strut protruding into LM (TAP technique)
 -IVUS run showed satisfactory results



Conclusions. -COVID-19 infection makes a stable plaque into unstable plaque.
-Severely calcified lesions associated with significant thrombus can be safely handled by lithotripsy.
-Preparation of vessel bed is essential for better results.