

CTO retrograde PCI

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Patient History-

65 year Male, Hypertensive, Non diabetic

Presented with NYHA Class III angina

LVEF =57% ,No RWMA

ECG :NSR,WNL

CART : Prox LAD Sig ds ,LCX after OM2 Sig ds., Ostial RCA Sig. Ds, RCA Mid CTO filling by septal cc2 From LAD

Plan :CABG/ Multivessel PCI

Taken up for PCI ? RCA CTO f/b PCI To LAD/LCX

Syntax score- 31, J CTO score- 1

Attempt 1: PCI to RCA CTO was tried with Fielder FC wire over balloon support ..followed by XT ..Going into small branch again and again....failed to cross

Attempt 2: Antegrade

Rt Femoral Approach

Fielder FC wire used to negotiateGoing into small branch at CTO Site again and again

Wire escalation could not be done due to repeated entry into small branch

Attempt 3: Retrograde

Sion Wire tried to negotiate into septal collaterals via 150 cm Corsair Pro XS Microcatheter.... multiple efforts after surfing but unsuccessful

Septal collaterals surfing changed to more proximal one just near distal end of LAD stent

Followed by Suoh 3 Wire tried to negotiate acute bend in septal collateral

- Corsair Pro XS Negotiated till distal Cap of RCA CTO, over Suoh 3 wire

- Antegrade Wire Fielder XT R tried to negotiate, as retrograde wire act as a distal Marker but unable to cross.

Retrograde wire changed to Fielder XTR crossed to the proximal true lumen into RCA guide

Corsair pro XS into RCA Guide after trapping with Balloon

Exteriorization with 330 cm RG3 done via Right guide catheter ,

Wire crossed from Needle introducer over Tuohy

Predilation of Lesion done with 2x10 mm balloon over exteriorized RG3 wire
Distal RCA also revealed significant Lesion

2 long DES Implanted from distal to ost-proximal RCA

RG3 Wire pulled from Left guide after gentle disengagement from LM
Safety Cine for any collateral's injury.

Final Result and Take-home message-

Retrograde CTO intervention is a promising way to make entry into true lumen.

Failed CTO with side branch with good interventionist collaterals are indications of primary retrograde approach.

Failed antegrade CTO are indications of primary retrograde approach.

Suoh 3 Wire and Corsair Pro XS are very useful tools for retrograde collaterals crossing.

Excessive force should never be applied while taking out Exteriorization of RG 3 wire at end of procedure.

Kissing microcatheter technique should be avoided to prevent cheese cutting and collaterals damage.