Struggling to cross the uncrossable

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- A 72-year-old male patient, HTN, heavy smoker.
- Crescendo angina associated with SOB for the past 6 months.
- Echo: preserved contractility (EF = 56%), mild hypokinesia of apex.

11/11/1950 M
New Cairo Univeristy Hospital
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Cardiac
Left Coronary 15 fps
WL: 138 WW: 190 [D]
RAO: 2 CAU: 37
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Cardiac
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CRA: 35
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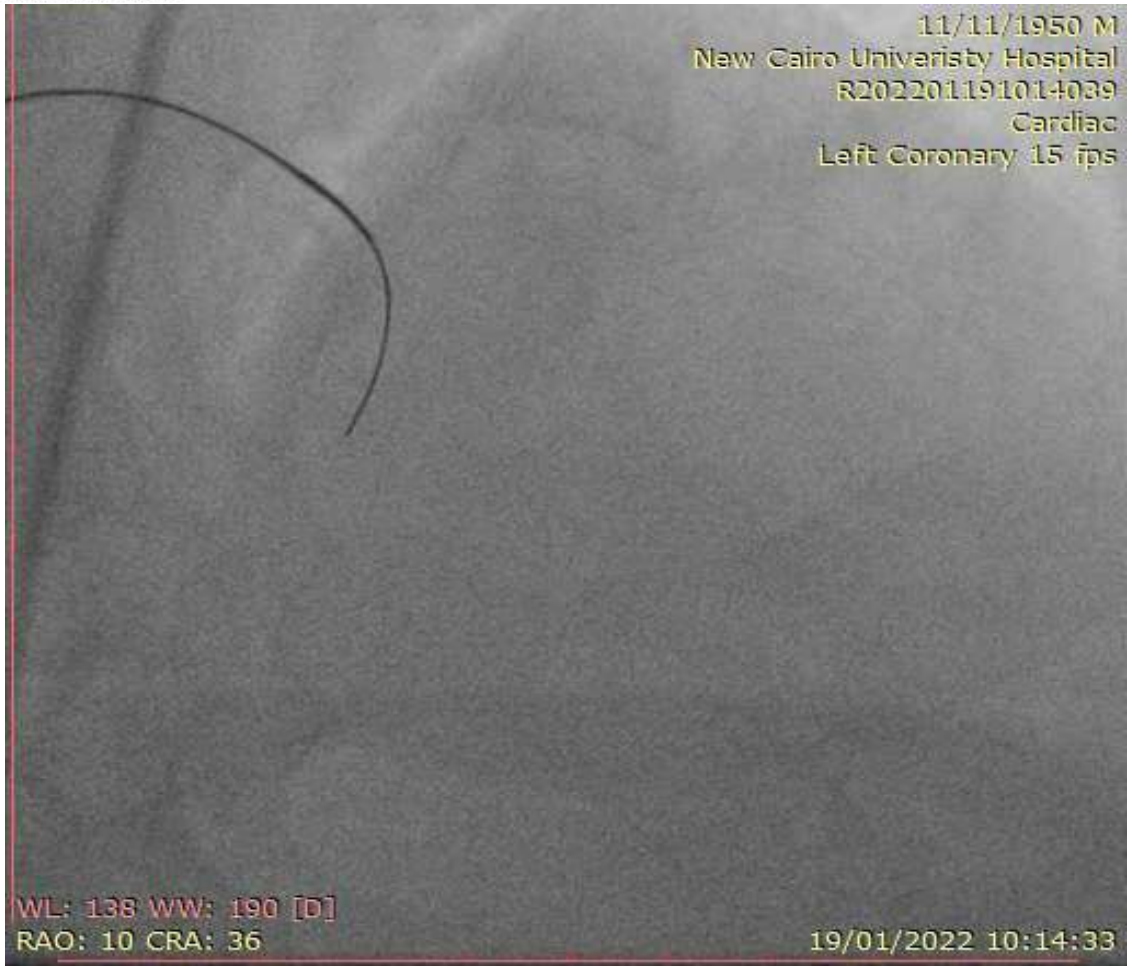
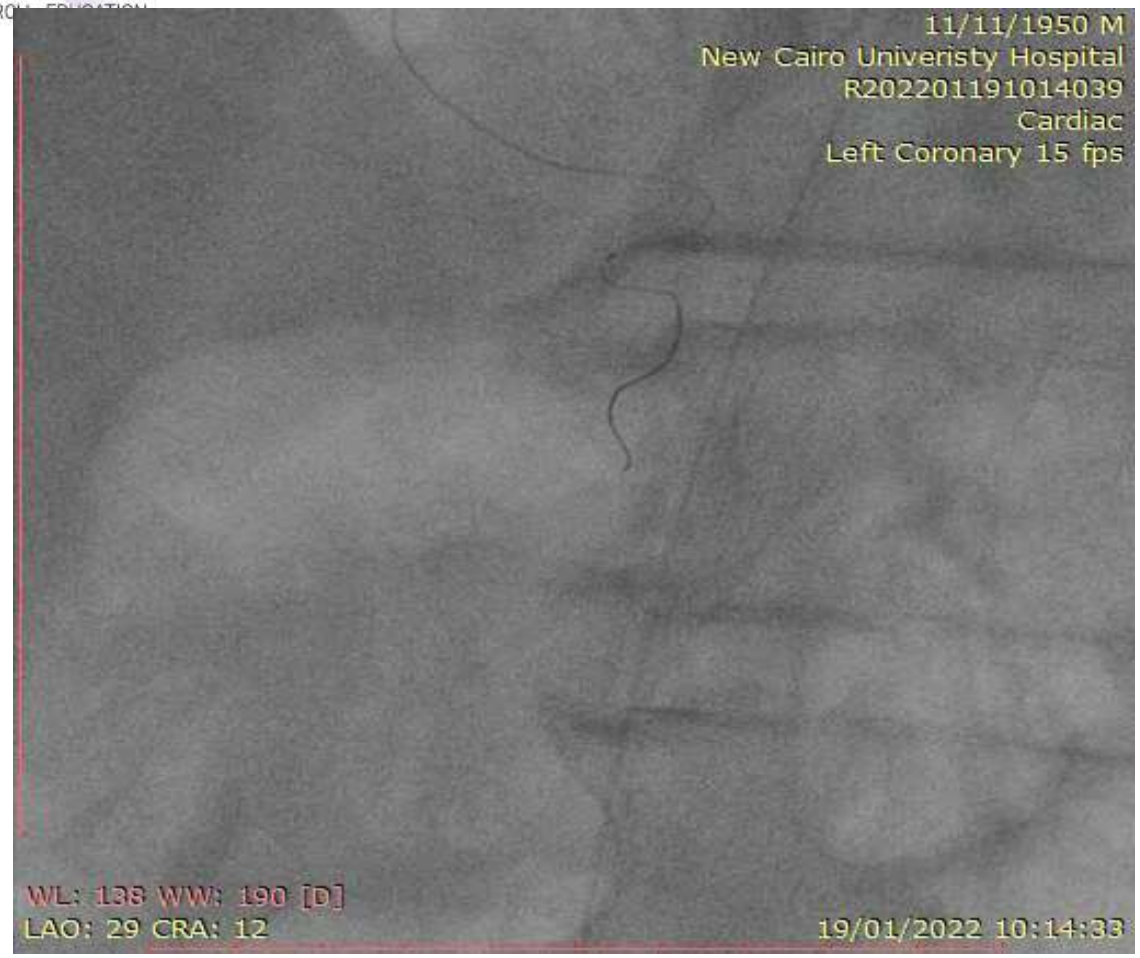
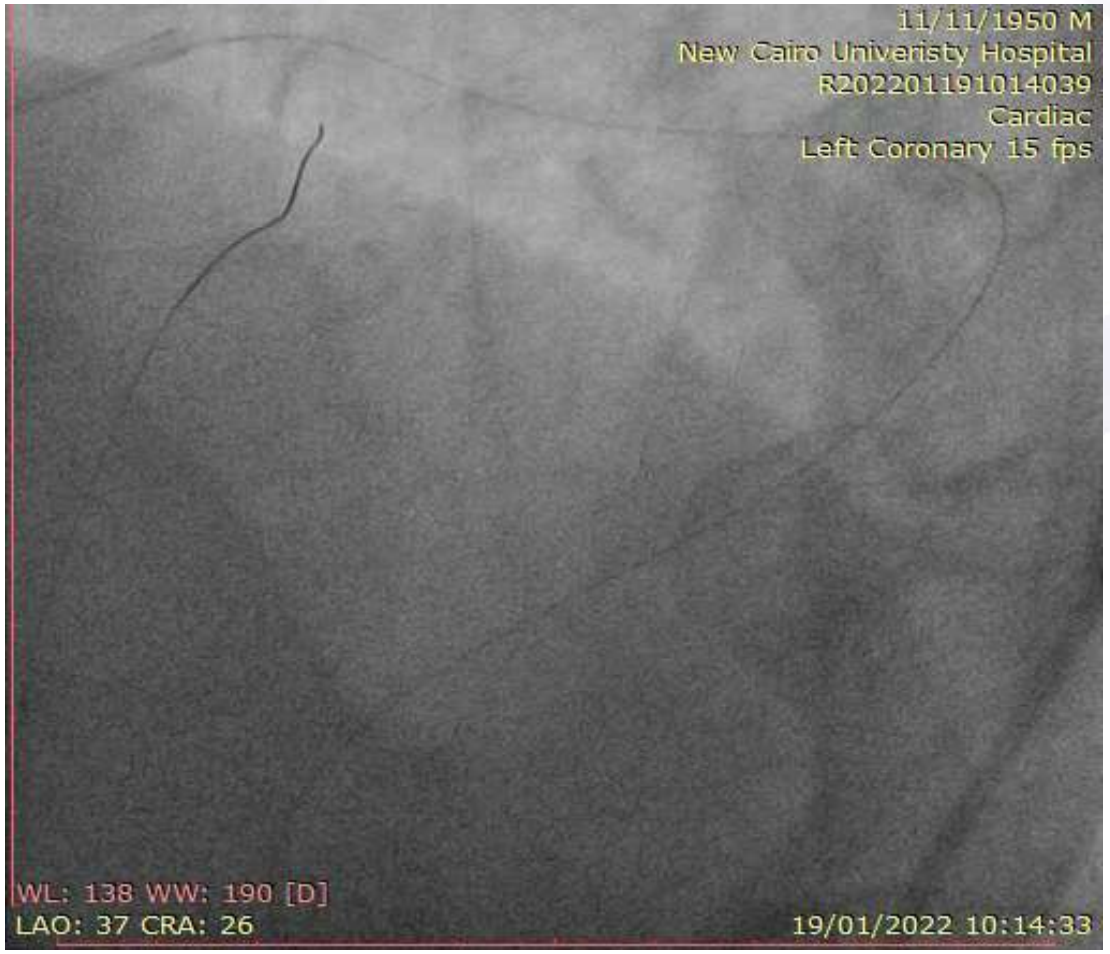


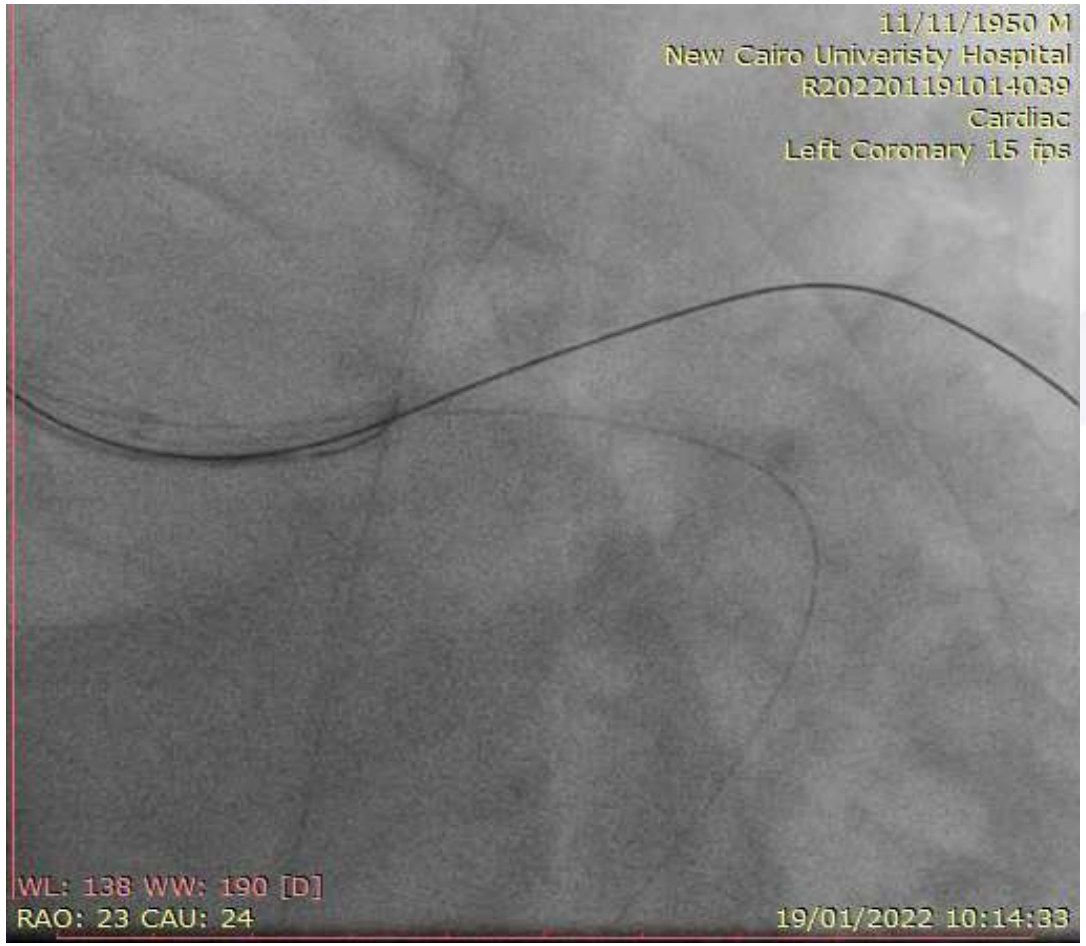
All trials to cross and penetrate the proximal cap of the mid LAD CTO using escalating wires; Fielder XT-R, Gaia 3rd, Conquest pro 12, using "Corsair and even twin-pass dual lumen microcatheters" failed.

Retrograde approach through the distal LCX tortuous epicardial collaterals (Failed initial attempts)
using different microcatheters (mamba flex, caravel 150) and Sion black wire failed



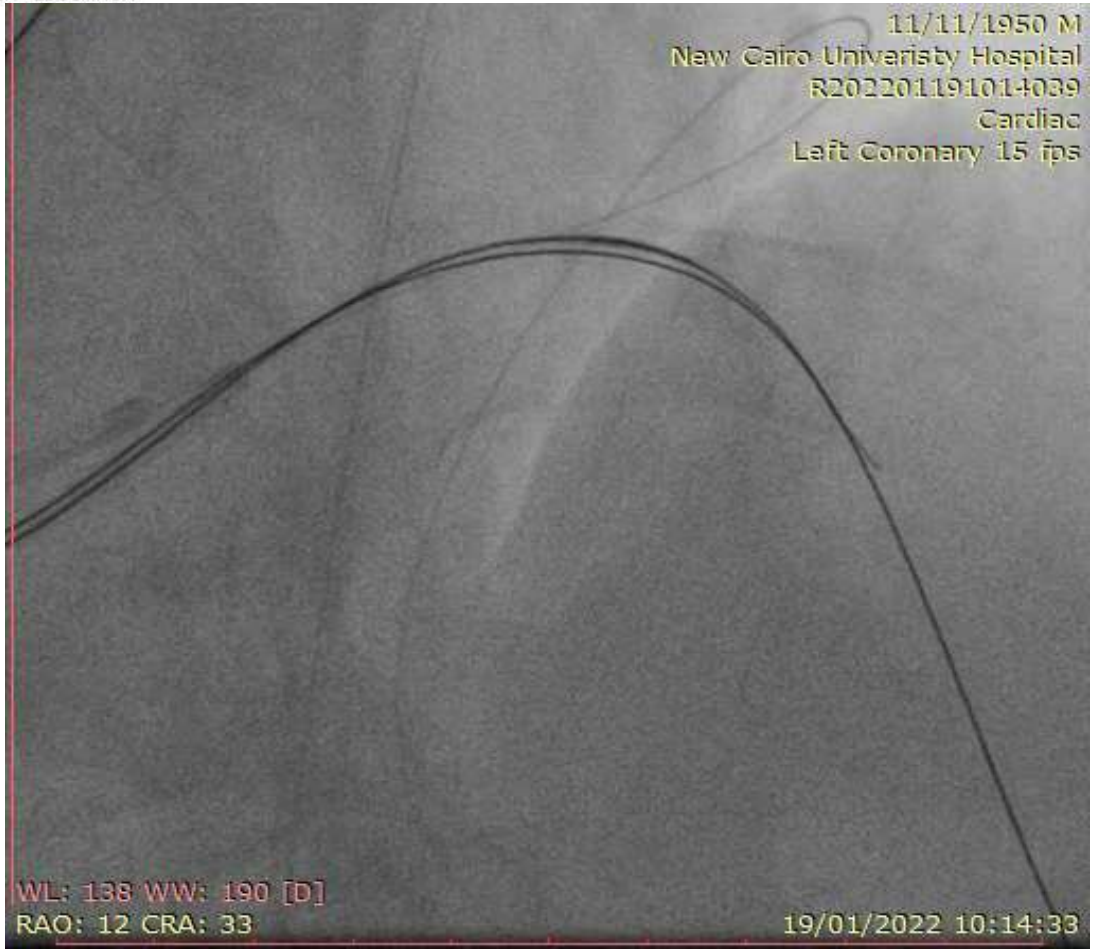


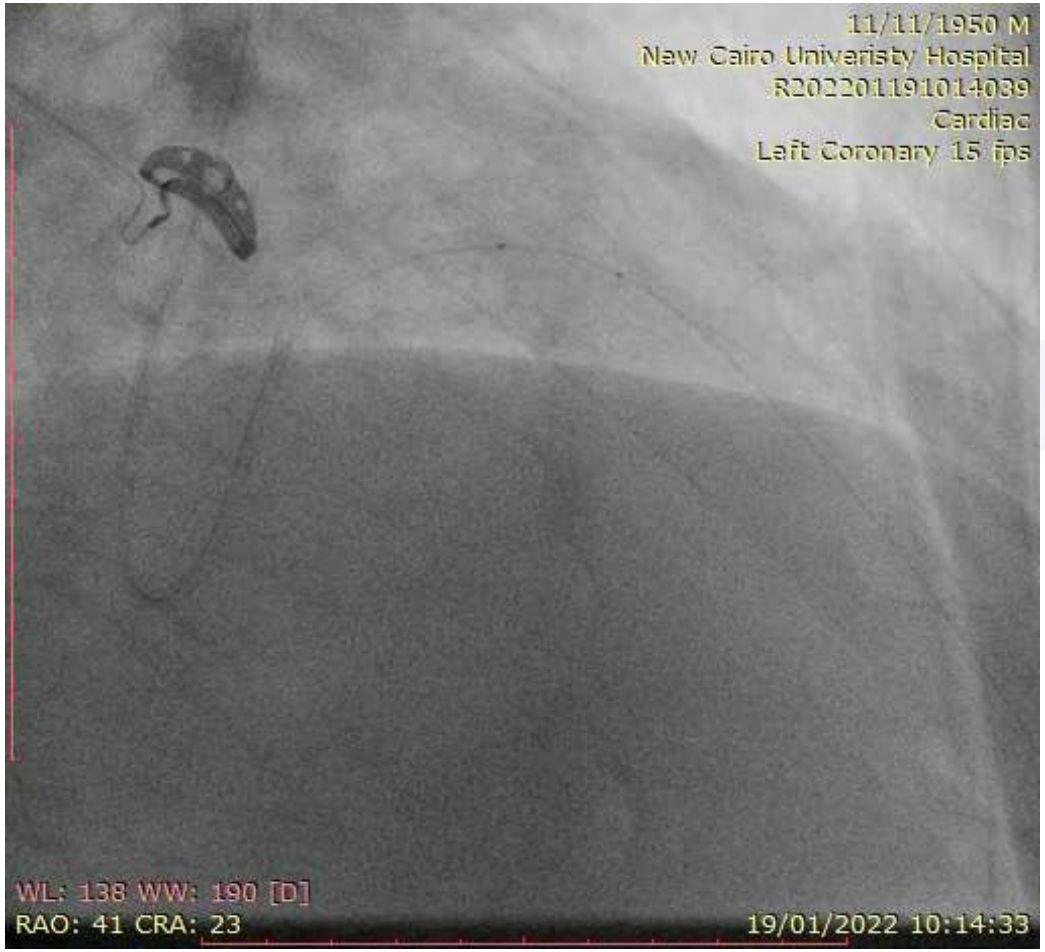
Retrograde approach through the distal LCX tortuous epicardial collaterals (Success)
using Finecross150 microcatheter and Sion black wire



Retrograde approach through the distal LCX tortuous epicardial collaterals

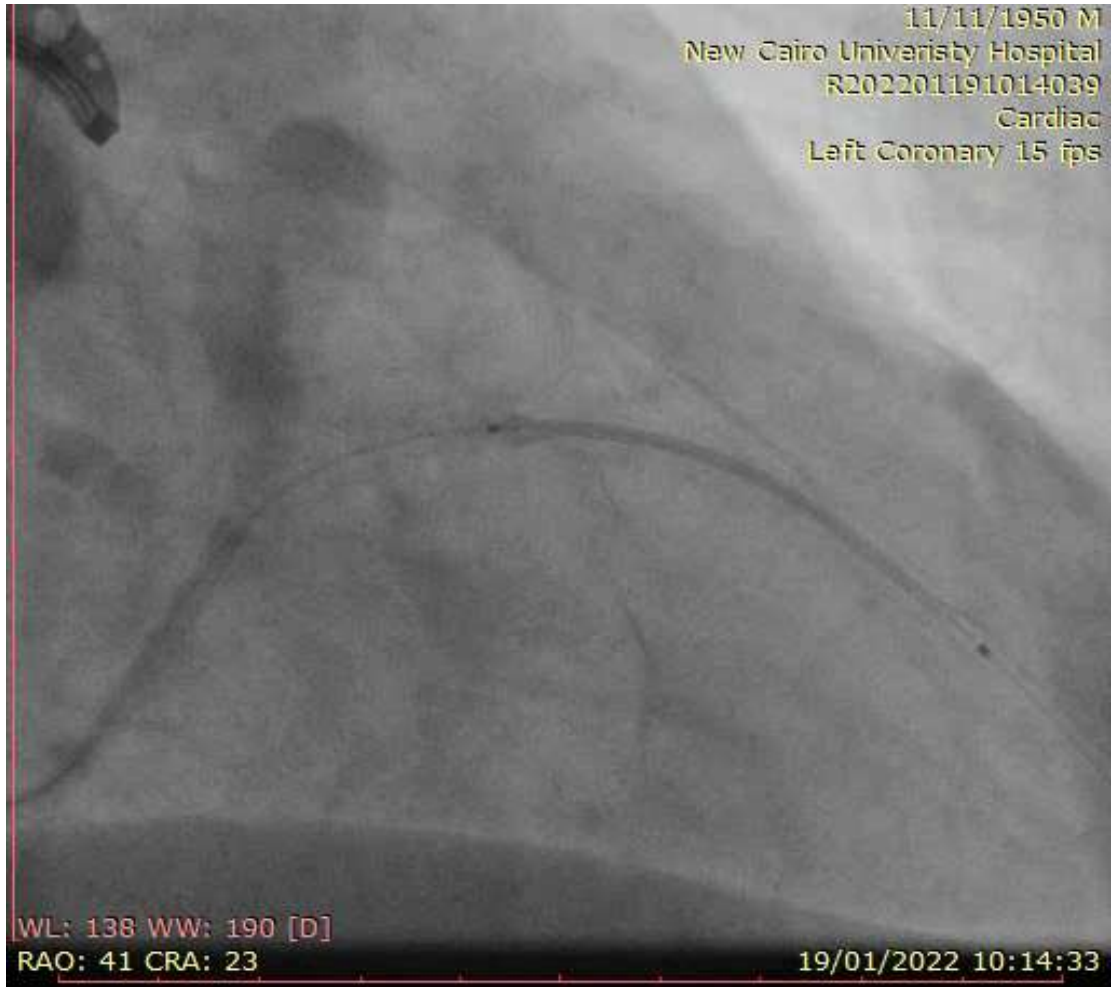
Using dual guiding catheters “Ping-pong technique”; trial of tip in with Conquest pro 12 wire (only wire that succeeded to cross the proximal CTO cap while the finecross microcatheter could not follow)





Retrograde approach through the distal LCX tortuous epicardial collaterals

Using the retrograde Conquest pro 12 wire as marker, success was only achieved by using another Conquest pro 12 antegradely through corsair pro microcatheter (over the retrograde Conquest wire)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11/11/1950 M
New Cairo Univeristy Hospital
R202201191014039
Cardiac
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Final Result

TAKE HOME MESSAGES

- **Advances in equipment and technique** have undoubtedly led to improvements in the field of CTO PCI, and operators must familiarise themselves with these to achieve good outcomes for patients.

- **AWE** remains the predominant strategy for crossing short CTOs of lower complexity.

- However, many CTOs can only be opened with a **dissection-based strategy**, and **ADR** offers a safe and efficient means to achieve this when used in appropriately selected cases.

- **Impenetrable (proximal) cap** is a special CTO entity that needs operators to alternate between different strategies and approaches (antegradely and retrogradely) to be able to succeed.

- **Be patient** and don´t be stuck in failure mode; try your best till you succeed.

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