



Minimum contrast retrograde CTO PCI in patient with multiple kidney transplantation

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- 47-years-old female
- Diabetes mellitus from 1980
- A single kidney due to congenital aplasia, kidney transplant in 2001, and repeated kidney transplant in 2011 due to transplant failure. Creatinine level of 125 $\mu\text{mol/l}$ before the current PCI
- Patients suffered from exertional angina and breathlessness despite the optimal medical therapy
- RCA PCI 3 months before the current case when CTO of the LAD was detected

RCA stenting 3 months before current PCI



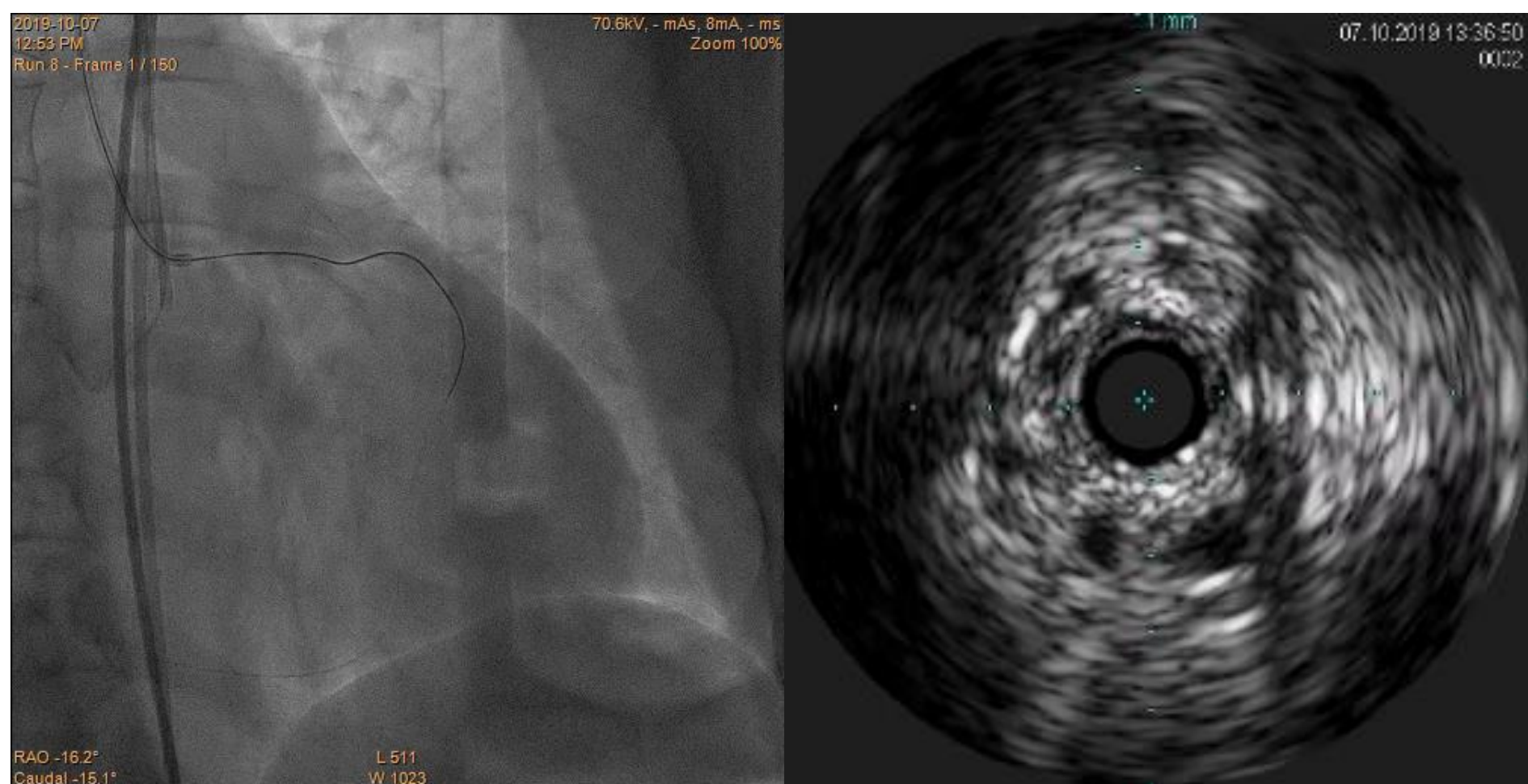
DES was implanted in the prox-mid RCA 3 months before. Good collaterals to the LAD was revealed

LCA 3 months before the current PCI

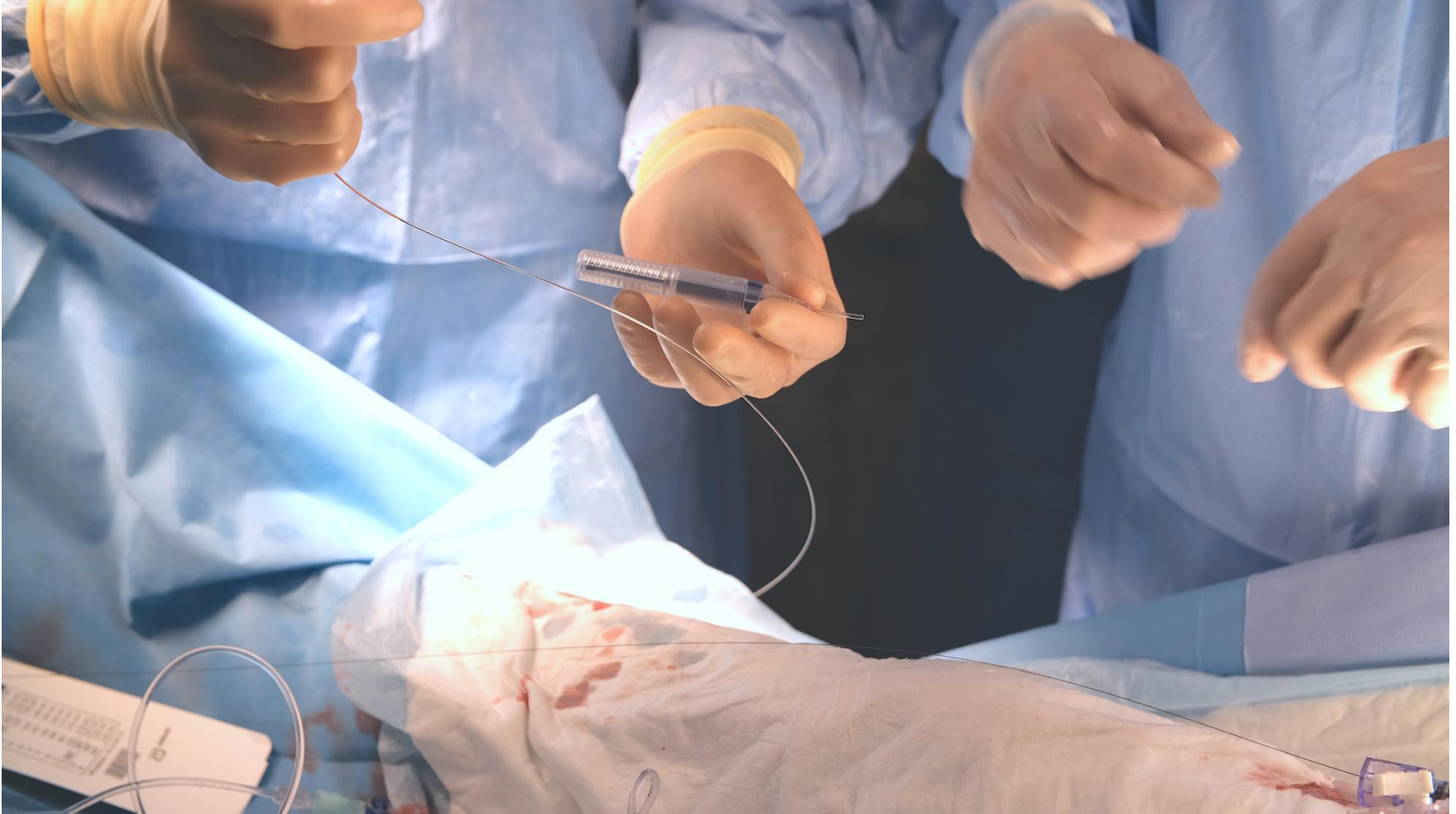


Chronic total occlusion in the prox-mid part of the LAD was showed on previous angiogram

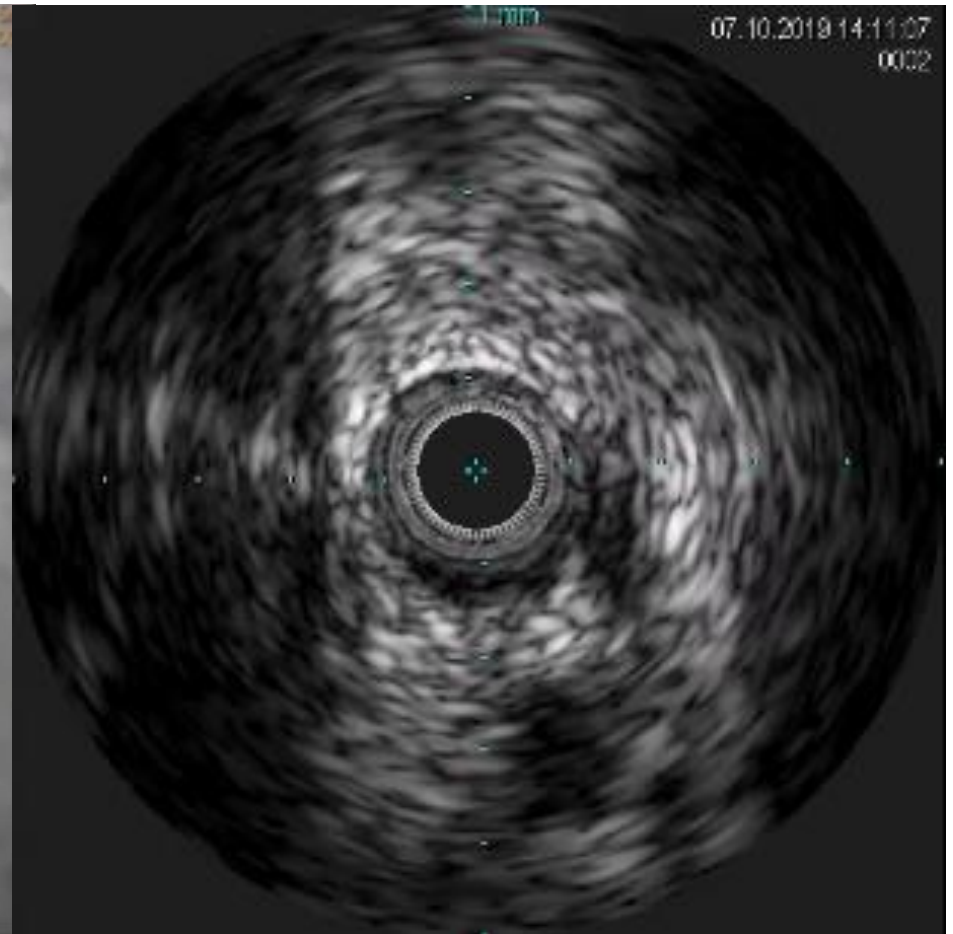
Retrograde wire crossing



Wire successfully crossed the occlusion in the LAD through the collaterals from the RCA and captured through LCA guiding catheter under IVUS guidance, which showed correct into the vessel lumen position of the guidewire.



Assistance position system is an accessory that allows mm-precise manipulation of the IVUS catheter when fixed on it. In this case we used it to confidently control the IVUS catheter position during guidance and to accurately determine lesion length and stent selection.



3.0x12 mm and 2.75x38 mm DES were implanted and post-dilated. Final IVUS pullback showed correct stent apposition and full plaque coverage

- Few ml of contrast media was injected in the end of the procedure to check an antegrade flow.
- Very low contrast volume CTO recanalization represents safe and effective treatment method in patients with multiple transplant kidney.
- Stent positioning assistance system can be used for measuring length of the plaque, especially in the case of automatic pullback option absence.