

**A case of successful treatment for severe coronary artery disease including severely calcified RCA CTO and classical low flow low gradient aortic stenosis**

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A 79-year-old male on hemodialysis presented to our hospital with disdialysis. CAG showed severely calcified RCA CTO and moderate lesion of mid-LAD which was positive on FFR-CT. Echocardiography showed classical low flow low gradient AS with reduced LVEF of 24%. PCI and TAVI was planned because he refused a surgical strategy whose risk was high.

After PCI for mid-LAD, we attempted PCI for RCA CTO with antegrade approach, but antegrade wiring was difficult due to severe calcification within the CTO. Though retrograde approach via the septal channel seemed to be essential, there was a severely calcified diffuse lesion in the proximal LAD which was a potential risk of ischemia during retrograde procedure. In addition, insertion of IABP or Impella was hesitated because of his shaggy aorta and AS. Therefore, PCI for the proximal LAD was performed with IVL, and balloon aortic valvuloplasty was performed to bridge to TAVI and to reduce the risk of hemodynamic compromise during PCI for RCA CTO. After the procedure, we performed successful PCI for RCA CTO with bidirectional approach. Finally, we performed transfemoral TAVI after TAVI for hemodialysis patients was approved in our hospital. About two years have passed without any cardiac events.