

1024 A CHIP case presentation; RCA CTO PCI contributed to the improvement of functional mitral regurgitation with severe LV dysfunction.

Because functional mitral regurgitation (MR) bases on the patient's LV dysfunction, the strategy for treatment is still controversial. We experienced an (right coronary artery) CTO (chronic total occlusion) case with severe functional MR, severe LV dysfunction; LVEF 20%, and severe decrease in his kidney function.

The case is a male in his seventies. He was transferred to our hospital due to treatment for uncontrollable heart failure. We treated him with medical therapy and hemodialysis, but severe functional MR had not been changed. Furthermore, paroxysmal atrial fibrillation made it difficulter to keep enough hemodialysis. We discussed the strategy for his treatment with our heart team, and finally decided to do RCA CTO PCI.

We did PCI from his right brachial artery and right femoral artery, because of leaving left femoral artery for the mechanical support. We could not advance antegrade wire and we suspect that the wire had been into the subintimal space, so we moved to retrograde approach. We succeeded in advancing the retrograde wire via LCX-LV surface-distal RCA channel and complete externalization after Reverse CART and pick-up technique with guide extension catheter. Finally, we put 3 drug-eluting-stents and got complete recanalization for RCA. Afterward, we did PCI for LAD.

After PCI, his functional MR level improved from severe to mild, and he got well without atrial fibrillation and hemodialysis.