1023 Successful PCI for STEMI with giant thrombus due to giant coronary artery ectasia.

At first, his past coronary history was very important to understand this case.

At the age of his 34, First PCI for STEMI of left circumflex artery (LCX) at another hospital. The culprit lesion was mid LCX. Bare metal stent (BMS) was deployed in primary PCI, but retrograde dissection occurred at the proximal edge of 1st BMS. Then 2nd BMS was additionally deployed. Final shot become TIMI grade 3 and no more injury.

At his age of his 43, Coronary CT was performed for the first time at 9 years after primary PCI. In coronary CT angiography, coronary ectasia with a diameter of 7.5 mm at the proximal edge of BMSs in LCX was found out for the first time. Although his treatment plan became observation by medications (aspirin and statin). Then he moved, he continued to take medications without any examination after that.

At the age of his 49, new STEMI (Killip I ) onset at midnight. He was admitted to our hospital for the first time. The onset to hospital time was 2 hour. In his ECG, ST elevation in inferior leads and mirror image in precordial leads were found out. The emergent coronary angiography was performed. LCX was obstructed with a giant thrombus in significant ectasia with a diameter of about 16 mm from the proximal edge of previous BMSs. At his RCA and LAD, there were no stenosis and collateral to LCX. We chose Primary PCI, because this case was emergent STEMI case at midnight. Primary PCI was fastest way to early reperfusion. For prevention of the distal embolization and slow-flow/no-reflow phenomenon, it was important to minimize the thrombus as much as possible. Therefore, we used a 4Fr hand pit pulse infusion catheter to dissolve thrombus by urokinase. The Urokinase 180,000 units was sprayed by inserted that hand pit catheter. After sprayed Urokinase, thrombus was reduced. Although thrombus was not completely disappeared, we judged that the risk of slow-flow/no-reflow phenomenon became low, because thrombus was able to be reduced as much as possible. Therefore, drug eluting stent (3.5 x 38 mm) was deployed over the thrombus. In final angiography, TIMI 3 flow was obtained (Procedure time: 210 minutes). The maximum his creatine kinase was 1863 IU/L. He was discharged on day 18 with DAPT and warfarin.

Atherosclerosis was the most common etiology of acquired causes of coronary ectasia, however, iatrogenic such as PCI was very rare. This case was a valuable case to prove that it was slowly extended over time due to injury by previous PCI.