Successful Percutaneous Coronary Intervention in a Patient with Dextrocardia and Situs Inversus

The dextrocardia with situs inversus is characterized by mirror image of the heart and the viscera with an incident of approximately one per 8000~10000 from literatures. In this case, we reported a dextrocardia patient complicated with angina pectoris underwent percutaneous coronary intervention (PCI). A patient was 78 years old male, complained a chest discomfort on effort. Myocardial ischemia at the left ventricular apex was recognized on exercise SPECT imaging with 201-Tl. We performed coronary angiogram (CAG) via his right brachial artery. Left coronary artery which was anatomically located on right side, was able to be cannulated with usual manipulation of a 5Fr Judkins Left 3.5 catheter. Right coronary artery (RCA) which was anatomically located on left side, was able to be cannulated with anticlockwise rotation of a 5Fr Judkins Right 4.0 catheter. CAG revealed the significant diffuse stenosis of left anterior descending coronary artery (LAD) #7-8. He underwent a PCI for #7-8. The electrocardiogram was attached with limb and precordial leads reversal. Guiding catheter was enforced using 6Fr Judkins Left 3.5 by approach via his right radial artery commonly. Two drug eluting stents for #7-8 were placed and the stenosis was improved. PCI in patients with dextrocardia and situs inversus requires appropriate use of electrocardiogram, engaging guiding catheters, and radiological angle views. We were able to perform CAG and PCI with normal catheter of curve of Judkins Left or Right with the reverse approach side and the opposite direction catheter rotation.