A rare case of Resolute Integrity Stent Deformation

Nagoya Daini Red Cross Hospital, Japan Yuh Mori

A 73 years old woman with a history prior myocardial infarction and was implanted 2.75x22 mm Resolute Integrity stent at seg11. She also had a LAD just ostial severe stenosis and we performed PCI to this lesion 2 month after MI. Access was obtained from right radial artery. A Crusade catheter was needed for LAD wiring because of the acute bend of the LAD ostium. After predilatation with scoring balloon, we putted Resolute Integrity 3.0x30mm at LMT-LAD. We performed final KBT using 3.25mm NC balloon (LAD) and 3.25mm semi-compliant balloon (LCX) for fear of the stent deformation. However after FKB, the IVUS catheter did not cross the lesion. We tried to dilate with 2.0mm semi-compliant balloon but it also did not advance. We decided to crush the previously implanted stent to vessel wall and recrossed the wire to LCX. 2.0mm semi-compliant balloon easily advanced. The indentation did not disappeared after compressing high pressure. After several times we dilated, the indentation disappeared so we checked the IVUS. Unfortunately the stent showed only longitudinal deformation and stent proximal segment was in the LMT. We tried to recross the wire with IVUS guidance and successfully crossed through another part of stent. Finally we performed FKB. We think that when we recrossed the wire we might crossed the wire through closed strut of stent. Less than 2.75mm size of Resolute Integrity had a closed strut at proximal part. To prove this prediction we performed a bench test using silicon tube and OCT.