

1110 A case of coil embolization for LMT aneurysm

The case was a man in his early seventies, and he underwent prior PCI for severe stenotic LMT with ulceration. A 3.5mm sized single stenting for LMT-proximal LAD with KBT was performed. Follow-up angiography showed no restenosis, but the IVUS image showed PSS (peri-stent contrast staining) in the LMT, at the opposite side of LCX. The follow up coronary CT imaging showed gradual enlargement of the PSS area through 5 years, and the latest angiography and IVUS image revealed a wide-neck aneurysm with a maximal diameter of about 10mm. For the prevention of aneurysm rupture, coil embolization was performed. 8Fr. guiding catheter was engaged via femoral access. In order to keep the residual inflow to the aneurysm to a minimum, proximal end of the aneurysm must be filled more densely, therefore the microcatheter should be inserted via distal site of the aneurysm. We firstly tried to insert a hydrophilic coated, polymer jacket wire (Sion black; Asahi Intecc) through the stent strut located at the distal LMT. After successful insertion of the wire in a switch backed shape, a microcatheter (Excelsior1018; Stryker) could not follow the wire due to the poor supportability and the wire easily prolapsed to LAD. Then we had no choice but to deliver the microcatheter through the proximal strut, and 4 detachable coils (Target360 soft 5.0*100mm, 4.0*100mm, Target360 ultra 3.0*60mm, 3.0*60mm; Stryker) were subsequently deployed inside the aneurysm. After the fourth coil insertion, the angiography and the IVUS showed residual flow into the proximal triangular space remained in the aneurysm, but an attempt of another coil insertion did not work well because there existed little working space for stable coil insertion. In addition, the IVUS revealed final end of the coil floating in the distal LMT. For the prevention of late thrombosis, another stent implantation was required. After pre-dilatation with 4.5mm sized semi-compliant balloon, 4.0mm sized drug-eluting stent (DES) was implanted, then final IVUS and angiography showed optimal result. Through this case, we discuss some points to which attention should be paid in coil embolization for coronary artery aneurysm.