Recurrent in-stent restenosis with 3rd generation drug eluting stent

A woman in her late 60’s who was diagnosed with effort angina pectoris had a significant stenosis in the middle of the LCx and LAD. Therefore, we performed PCI and implanted 3rd generation drug eluting stent (EES) in the LCx. At a later date, we also placed 2nd generation DES (EES) in the LAD using IVUS without any complication. The coronary angiography underwent eight months later presented in-stent restenosis in the LCx while the LAD’s stent had no significant change. Considering size of artery and large lesion of restenosis, we put 3rd generation DES (SES) into the stent. However, the coronary angiography performed six months later revealed recurrent in-stent restenosis and eventually the lesion was totally occluded. In contrast, the stent in the LAD was intact. Recurrent in-stent restenosis was treated with a stentless angioplasty using drug coated eluting balloon with OCT guidance. The OCT exhibited neo-atherosclerosis developed inside the stent. Generally, 3rd generation DES relatively prevent neo-atherosclerosis than other stents. Thus, we consider this case is rare and will report this recurrent in-stent restenosis case which may have relationship with 3rd generation DES.