

A case of stent thrombosis following side branch stenting for the Medina 0,0,1 coronary bifurcation lesion caused by metal carina.

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A 78-year-old man demonstrated a 90% stenosis at the ostium of #4PD in superdominant RCA(Medina 0,0,1). To gain the optimal coverage to the ostium of #4PD without the disadvantage of an excessive amount of metal in the main branch, we avoided the crossover stenting to #3-#4PD, but implanted BMS(ML8 2.75x23mm) to the ostium of #4PD with minimal protrusion to the main branch with the guidewire protection of #4PL. Angiographic result was satisfactory, but IVUS cannot pass toward #4PL. Since excess stent protrusion to the main branch was considered to disturb the device passage, we tried to cross the guidewire to the protruded stent strut, and dilated with the 2.5mm semi-compliance balloon, and the FKBT was performed with the 2.5mm balloon to the #3-#4PL and 2.75mm balloon to the #3-#4PD. Six months later, follow-up CAG revealed total occlusion with thrombus at the site of the stent. IVUS following predilation revealed an under expansion of the initial stent and protrusion of stent struts resulting in metal carina in the main branch. Ballooning either in main branch or side branch failed to dilate both arteries. Therefore, we re-wired the guidewire by IVUS guidance to minimize the struts-protrusion, then performed KBT and successfully dilated the lesion. In this case, stent thrombosis was supposed to be caused by flow disturbance of metal carina and underexpansion of the stent. We report this case with some bibliographical considerations.