Comparison with three treatment methods result of denovo coronary lesion in the same patient

The 63 years old gentleman had coronary artery disease risk factors of diabetes mellitus, cigarette smoking, hyperlipidemia and hypertension. For the first percutaneous coronary intervention (PCI), he had non-ST elevation acute myocardial infarction. Angiography showed tortuous and diffuse stenosis left anterior descending artery (LAD), culprit lesion at middle of left circumflex artery (LCX), and chronic total occlusion (CTO) of proximal right coronary artery (RCA) with collateral from several septal branches (SB) to distal RCA. An abluminal biodegradable polymer biolimus stent was implanted for the LCX lesion smoothly. For the second intervention, the result of LCX drug eluting stent was acceptable after six months. RCA was totally occluded at very proximal and supplied by LAD and SB. Retrograde CTO PCI was considered therefore LAD PCI was selected prior to RCA. Paclitaxel drug eluting balloon (DCB) only strategy was chosen between metal stent jacket or left nothing behind dilemma of LAD therapy. There is no significant dissection after plan old balloon angioplasty of LAD. Therefore, two DCB (2.5mm X 30mm and 3.5mm X 20mm) were applied to LAD uneventfully. For third PCI, the result of LAD is acceptable and even positive remodeling compared to last invention after ten months. He had bilateral approach for RCA CTO. The retrograde micro-catheter was advanced from SB to distal of RCA freely without obstacle by stent. The CTO intervention was success by antegrade buddy wire technique. The third procedure was finished after three bare metal stent (BMS) deploy due to patient’s financial reason. For fourth PCI, he had recurrent typical angina during clinic follow up after three months. The result was constant at LAD and LCX except instent re-stenosis of RCA. He had symptoms free after DCB therapy of RCA. The result comparison was same in DCB and drug eluting stent and outstanding than BMS in this patient. DCB only strategy may be feasible in large coronary artery in this patient.