1129 Usefulness of “double side branch protection technique”.

A 70-year-old man was referred to our hospital with a chief complaint of chest pain. He has several coronary risk factors including hypertension, diabetes mellitus, and chronic kidney disease. His electrocardiogram revealed ST elevation in anterior precordial leads, and reciprocal changes in inferior leads. He was diagnosed with ST elevation myocardial infarction (STEMI) and an emergency coronary angiography (CAG) was performed.

Coronary angiogram revealed multiple vessel disease and mid left anterior descending coronary artery (LAD) was occluded. PCI was performed for LAD via right radial artery. A 7Fr EBU 3.5 with side-holes guiding catheter was engaged into left coronary artery. A SION blue guidewire supported by micro catheter could be crossed the lesion. After a Runthrough NS Ultra Floppy guide wire was inserted into first diagonal branch (D1), and a SION guide wire was inserted into second diagonal branch (D2), plain old balloon angioplasty (POBA) was performed with 2.0mm semi-compliant balloon. Since there was a high risk of occlusion both D1 and D2 after stent deployment, we decided to protect both branches with “double side branch protection technique”.

A 1.5mm semi-complaint balloon was advanced into D1, and a microcatheter was advanced into D2. Subsequently, a drug eluting stent (ResoluteOnyx 2.5×38mm) was introduced into LAD. Then, simultaneously modified jailed balloon and jailed micro catheter technique (“double side branch protection technique”). A 1.5mm semi-complaint balloon and micro catheter were able to withdraw with less resistance.

After reinsertion of an ABYSS EXCEED FF guide wire into D2 and SION guide wire into D1 using double lumen catheter, kissing balloon inflation was performed for each branches. Finally we succeeded in protecting the both branches.

If occlusion of two or more side branches is predicted, “double side branch protection technique” seems one of the useful options.