

C064

Two successful cases applied rotational atherectomy in acute myocardial infarction

#### Case 1

A 79-year-old male on chronic hemodialysis was admitted to our hospital with ST-elevation myocardial infarction (STEMI). Coronary angiography (CAG) showed total occlusion of the mid-segment of the right coronary artery (RCA), then percutaneous coronary intervention (PCI) was performed. Since a balloon angioplasty using a mother in child catheter back-up after a thrombus aspiration was failed due to severe calcification of the lesion, we decided to apply the rotational atherectomy to the STEMI lesion. After the guide-wire exchange to a RotaWire floppy, we advanced 1.25mm and 1.5mm burr (180,000 ? 200,000 rpm) to the lesion, and it was completed without no-reflow phenomenon. Subsequent balloon dilatation and stent placement was performed successfully. Final angiography showed a remarkable expansion of the lesion and TIMI-3 grade flow was obtained.

#### Case2

An 82-year-old female visited our hospital, and diagnosed with non-STEMI and CAG showed diffuse severe stenosis from left main trunk (LMT) to a middle segment of the left anterior descending artery (LAD). Despite a negotiation of a guide-wire to the lesion, any devices could not pass the lesion due to focal severe calcification. Then, we decided to perform the rotational atherectomy only to this focal lesion with 1.25mm and 1.75mm burr (180.000 ? 200.000 rpm). After this procedure, successful balloon dilation and stent placement was performed. Final angiography showed favorable expansions of the lesions and TIMI-3 grade flow was achieved.

The Rotational atherectomy is a relative contraindication in acute myocardial infarction (AMI), because rotator is thought to cause platelet activation and aggregation in such thrombotic status. But in the selected cases of AMI with relatively less thrombi and severe circumferential calcification, the rotational atherectomy may be a useful technique to achieve successful PCI.