21 [10019]

A case of Rotawire Fracture during Rotational Atherectomy with Coronary Perforation

A 79-year-old male was referred to our hospital for percutaneous coronary intervention (PCI). Coronary angiography showed severe calcified lesions in the proximal left anterior descending coronary artery (LAD) and the middle right coronary artery (RCA). We performed PCI for LAD at first, following PCI for RCA in the next month. A 5-Fr pacing catheter was placed in the right ventricular apex. A 6-Fr AL-1.0 guiding catheter was inserted via the right radial artery. A conventional guidewire was passed through the lesion with a michrocatheter, exchanged for a Floppy Rotawire thereafter. We started to ablate the lesion using a 1.75-mm burr, the burr easily passed the lesion. However, during the burr pullback in guiding catheter with dynaglide, we found that the distal end of the Floppy Rotawire was fractured and remained in the distal site of RCA. The contrast injection showed leakage at the distal site of the guidewire fragment. Since the patient's vital signs were stable, we decided to complete stenting first. A conventional guidewire was immediately re-crossed, intravascular ultrasound (IVUS) showed some cracks in the calcified lesion. A 3.0-mm non-compliant balloon was inflated with 22 atm at the lesion. An everolimus-eluting stent (3.5 * 24 mm) was implanted with 18 atm, and stenting was successfully finished. We attempted to occlude the branch including the perforation site using an autologous blood within outer tube of puncture needle clot via a microcatheter. The branch was occluded and the perforation site was repaired. We confirmed there was no leakage by final angiography.