1075 Successful Bailout of Large Flap at Proximal Left Anterior Descending Artery Caused by Directional Coronary Atherectomy with Only "Re" Directional Coronary Atherectomy

Case:

An 85-year-old male visited our hospital having complained exertional dyspnea and chest pain for few months. Coronary angiogram (CAG) showed severely stenotic lesions with moderate calcified plaque at proximal left anterior descending artery (LAD) (movie 1). Subsequently we performed percutaneous coronary intervention for this lesion. Intravascular ultrasound (IVUS) revealed eccentric plaque with moderate calcification in epicardial side from left main trunk (LMT) to proximal LAD (movie2). After a guidewire was changed to supportive wire (ABYSS DCA Support), we performed directional coronary atherectomy (DCA) using ATHEROCUT L from distal LMT to LAD few times. We obtained some white plaques and sufficient lumen area at LMT (movie 3). In addition, DCA catheter delivered to proximal LAD, and we excised plaques repeatedly. IVUS findings after 4 times debulking revealed flap in just proximal LAD (movie 4). Although we performed DCA again in order to remove this flap, and then new large flap occurred on the opposite site at proximal LAD (movie 5). After we carefully located flap position with IVUS and angiogram, we succeed in eliminating flap without leaving any trace by DCA. We added the dilation with drug-coated balloon (SeQuent Please 3.5/15). Final CAG (movie 7) and IVUS (movie 8) showed great results without any stent.

Conclusion:

Flap in lumen was not rare findings after DCA, whereas large flap may cause flow limitation and acute occlusion in side branch or main vessel. Sometime, bailout with stent was needed, but in the first place, DCA was often used for bifurcation lesion including LMT in which stent implantation was complicated. In this case we could excised flap with skillful maneuvers, and bailout without stent. We need to learn characteristics of tool and educate our technique in preparation for every complication.