1072 A successful case of IMPELLA-assisted PCI for LMT bifurcation with calcification.

An 82-year-old man was taken in the ambulance to our hospital because of dyspnea. Pulse oximetry shows 75% O2 saturation on room air and chest X-ray shows the butterfly shadow. We diagnosed the patient with heart failure and he was immediately hospitalized for treatment. We performed coronary angiography to investigate the cause of heart failure, and that revealed severe calcified stenosis of left main trunk (LMT) bifurcation. After management of heart failure, Impella 2.5 assist device was placed into the left ventricle because of high risk lesions and maintaining the patient hemodynamically stable during the PCI. The left coronary artery was catheterized using an 8Fr Launcher Extra Back-Up 3.5 guiding catheter. Optical frequency domain imaging (OFDI) demonstrated severe calcified lesions with 270 degree at LMT bifurcation. Based on OFDI finding, lesion preparation with rotablator burr 1.75mm was performed for LMT bifurcation. After lesion preparation, OFDI images showed expanded vessel with cracking of calcified segments. Post-dilation with noncompliant balloons was done and we performed Culotte stenting with everolimus eluting stents. The kissing balloon technique was subsequently done, we could obtain a good final angiographic result. The patient remained hemodynamically stable throughout. The patient experienced a favorable clinical course and was discharged on foot from hospital five days after the procedure.