

Angioscopic findings of Honeycomb-like structure obtained by optical frequency domain imaging

A 74-year old man was referred to cardiovascular division due to pre-operative cardiac evaluation for orthopedic surgery. A ultrasound cardiogram showed reduced left ventricular ejection fraction, with wall motion abnormalities at the posterior wall. Coronary angiography revealed significant stenosis at the mid circumflex artery. After orthopedic surgery, we performed a staged percutaneous coronary intervention for circumflex artery. Optical frequency domain imaging(OFDI) was performed because there was a septum-like structure with intravascular ultrasound study. OFDI findings showed signal-rich, high backscattered septum dividing the lumen with multiple channels, so-called honeycomb-like structure. Consecutively we performed the angiography to obtain direct view of the structure. Angioscopic findings showed multiple septum dividing the lumen, but neither thrombus nor yellow plaque, suggesting vulnerable plaque, does exist. We implanted the Drug-eluting stent, resulting successful revascularization. A honeycomb-like structure finding of OCT was reported previously, representing recanalization of organized thrombus, but its angioscopic findings had never been reported. We report the direct intravascular view of the honeycomb structure obtained by angiography.