Images in Cardiology

Optical coherence tomogram of spontaneous coronary artery dissection managed with drug eluting stent

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A 42-year-old male patient with no known risk factors for coronary artery disease was admitted after an episode of break through seizures. Incidentally his electrocardiogram showed evidence of antero-septal myocardial infarction and the echocardiogram showed regional wall motion abnormality involving the inter-ventricular septum. Cardiac bio-markers including highly sensitive troponins were negative, thus excluding an acute event. Coronary angiogram (Fig. 1A & Video 1) showed dominant left system with intra luminal filling defects (arrow) in the proximal and mid left anterior descending artery (LAD). To further define the nature of the filling defects an optical coherence tomogram (OCT) was done, which showed dissection flaps (Fig. 1B) with multiple false lumens involving the proximal and mid LAD. Successful percutaneous intervention with drug eluting stent was done to the LAD. Good angiographic results (Fig. 1C & Video 2) were confirmed on OCT (Fig. 1D). OCT helped
in confirming the filling defects to be dissection flaps and also in
deciding the length of the stent to cover the entire diseased
segment.

Supplementary video related to this article can be found
online at http://dx.doi.org/10.1016/j.ihj.2014.02.005.

Conflicts of interest

All authors have none to declare.