

1013 The stabilization of a floating guiding catheter using a dual-lumen catheter in an acute coronary syndrome patient

A 73-year-old-man with hypertension, dyslipidemia and diabetes mellitus presented with sudden chest compression 2 hours before admission. His vital signs were almost stable, but the electrocardiogram showed ST elevation in lateral leads. While, the transthoracic echocardiography showed no apparent asynergy and mechanical complications. We diagnosed him as ST elevated myocardial infarction and performed the coronary angiogram, which revealed 3 vessels diseases including the total occlusion of the middle left circumflex artery (LCX). Since some guiding catheters could not engage into the left coronary artery, IL 3.5 SH finally led the soft wire to cross the LCX using the floating guiding catheter technique. However, this first-line soft wire with the conventional micro-catheter resulted in the subintimal wiring due to the poor controllability from the floating guiding catheter. Then, we tracked the dual-lumen catheter (DLC) on the first wire in the subintimal space, not using the second wire with conventional micro-catheter. This subintimal anchoring technique of DLCs made the guiding catheter stabilization. Thicker diameter rather than bare wires introduced more frictional coefficient; therefore, pulling the DLC inserted in the subintimal space could stabilize the back-up force, making the guiding catheter insert into the left coronary artery more deeply. The second polymer jacket wire could pass the true lumen easily with intentional wiring. After that, balloon dilations and a stent deployment were performed as usual. She got no significant cardiac dysfunction and received the percutaneous coronary intervention from the left main trunk to the left anterior descending artery 7 days after the primary procedure.

Floating guiding catheter technique is often required. As stabilization-option, balloon anchoring technique sometimes requires the bigger guiding catheters. Guide-extension devices are recently very useful, but often risky if the ostial lesion exists. Wire anchoring technique is the simplest and easiest, but the effect might be the weakest. DLCs could simply compensate wire anchoring technique. Pushing or pulling DLCs can control the guiding catheter position. Increasing adhesive area on the coronary artery generates the higher frictional coefficient. Therefore, DLCs might have superiority to conventional micro-catheters in the percutaneous coronary interventions with a floating guiding catheter.