IMAGE IN CARDIOLOGY

Coronary stent loss and rescue PCI on LMCA

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65 year-old man with acute coronary syndrome diagnosis was transferred to our catheterization laboratory. Coronary artery angiography showed totally cut off left circumflex (LCX) artery at the proximal part (Figure 1A). Other coronary arteries were patent. Percutaneous coronary intervention (PCI) on LCX by using Sion Blue 0.014 guide wire was initiated. After crossing the lesion, pre-dilation with 2×12mm compliant balloon was done, and according to the lesion length, a 3.0×32mm drug eluting stent was chosen. Unfortunately, during the passing of stent in LCX, the stent was detached from the delivery balloon and compacted into the left main coronary artery (LMCA) while the balloon was in pulling back (Figure 1B). To save of left main and left anterior descending (LAD) coronary arteries, we decided to PCI on LMCA to LAD-LCX with the double kissing crush (DKC) technique. Initially, stent in the LMCA was crushed by using of a noncompliant (NC) 3.5×12mm balloon (Figure 1C); and after LCX rewiring, first kissing balloon inflation (KBI) was performed. Then, stent 3.5×23mm from LMCA to LAD was deployed and after LCX rewiring second KBI was done successfully (Figure 1D). Because of lack of IVUS in our center, LMCA post dilation with 4.0×10 and 4.5×10 mm NC balloons was performed as proximal optimal technique (POT) and aggressive POT respectively (Figure 1E). After a three days of in-hospital care, the patient was discharged home in a good general condition.

The incidence of stent loss is very rare and occurred frequently in calcified lesions and significant proximal angulations, like this case. Most patients underwent at least an attempt to retrieve the lost stent by snaring, small balloon technique and etc. In cases such as ours, where the stent is long and especially compacted, and also in cases of retrieval failure, stent deployment or crush is utilized. As final point, preserving the patient›s life and further reducing complications like acute myocardial infarction, emergency CABG and death is the main goals of managing stent loss patients.

Conflicts of interest: none declared.

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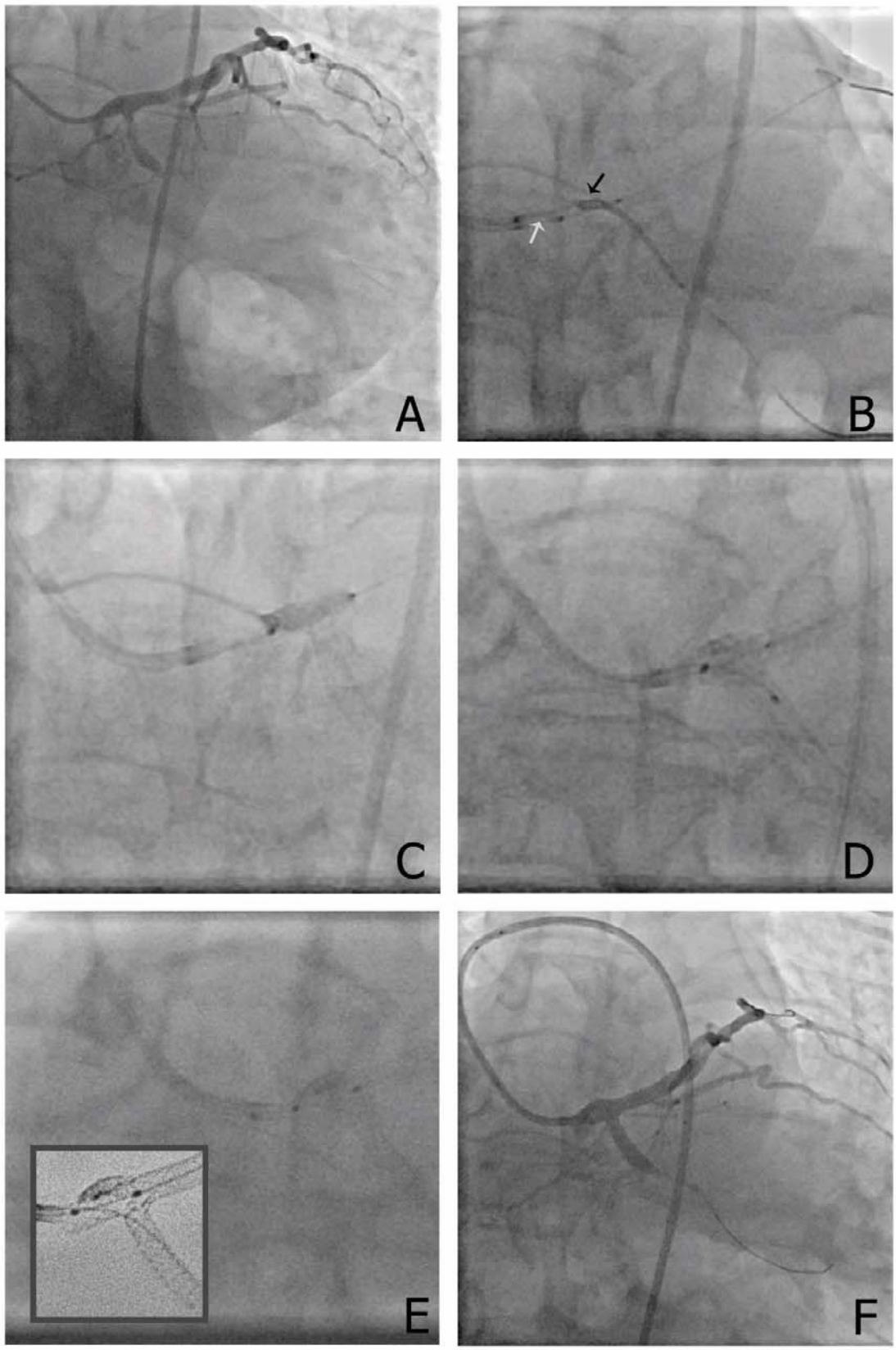

Figure 1. Diagnostic coronary angiography revealed totally cut off LCX artery at the proximal part (A); stent detachment from the delivery balloon (white arrow) and compacted into the LMCA (black arrow) (B); Crush the stent by using NC balloon (C); Second kissing balloon inflation between LCX and LAD stents (D); Proximal optimal technique for LMCA (E); Final angiographic view of successful PCI on LMCA with DKC technique (F).