

Stabilization of a slipping balloon during the treatment of in-stent severe restenosis - anchoring the balloon shaft in the guiding catheter

Stent içi daralmanın tedavisinde kayan balonu sabitleme yöntemi - Kılavuz kateter içinde balon şaftını sıkıştırmak

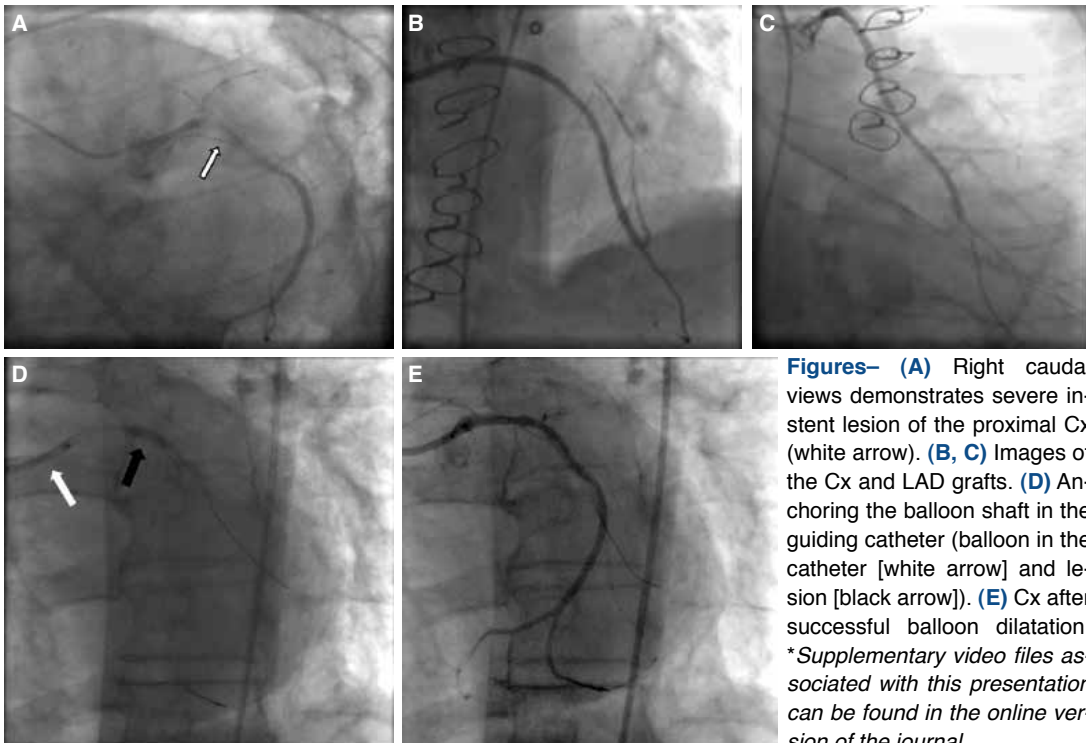
Ali Rıza Akyüz
Levent Korkmaz*

Department of Cardiology,
Akçaabat Hackali Baba State
Hospital, Trabzon;

*Department of Cardiology,
Ahi Evren Thoracic and
Cardiovascular Surgery Training
and Research Hospital, Trabzon

A 68-year-old man with the diagnosis of acute coronary syndrome underwent coronary angiography and subsequently percutaneous coronary intervention (PCI). He had undergone coronary artery bypass surgery (CABG) with two vessels two years ago and PCI four months after CABG. Coronary angiography demonstrated occluded left anterior descending artery (LAD) in the ostial region, severe narrowing of the circumflex artery (Cx) proximal stent (Figure A), non-dominant right coronary artery (RCA) with 60% narrowing, and open left internal mammary artery (LIMA) and CX-OM1 grafts (Figure B, C). PCI for the Cx proximal in-stent lesion was decided. At first, a JL4 guiding catheter was introduced to the left main coronary ar-

tery (LMCA). Then, repeated balloon dilatations with 1.5x15 mm semi-compliant and 3x15 mm non-compliant catheters were performed. Because the balloon slipped each time the lesion was dilated with a 3x15 mm balloon (Video 1*), the JL4 catheter was changed to EBU4, but this maneuver failed to stabilize the balloon in the lesion. Thus, it was decided to send a second wire through the lesion, but this also failed to stabilize the balloon. We then deployed another balloon (2.5x15 mm) into the second wire, and advanced it by the distal tip of the guiding catheter. This balloon was then inflated in order to trap the shaft of the balloon in the guiding catheter, in an effort to prevent the balloon from slipping. This maneuver was successful (Figures D, E, Video 2*). Balloon slipping is not rare, especially in severe calcific or in-stent lesions. To the best of our knowledge, this is the first case in which this technique was utilized. It may help physicians to treat this kind of lesion securely.



Figures– (A) Right caudal views demonstrates severe in-stent lesion of the proximal Cx (white arrow). (B, C) Images of the Cx and LAD grafts. (D) Anchoring the balloon shaft in the guiding catheter (balloon in the catheter [white arrow] and lesion [black arrow]). (E) Cx after successful balloon dilatation. *Supplementary video files associated with this presentation can be found in the online version of the journal.