

■ Sun-152 ■

A case of an iatrogenic coronary artery dissection successfully treated with drug-coated balloon

고려대학교 안산병원 내과학교실

*김정태, 이종석, 김용현, 임상엽, 김진석, 김성환, 안정천, 송우혁, 김선원

Introduction: Stenting of a long coronary segment with multiple drug-eluting stents (DESs), so called a “full metal jacket” procedure, is associated with worse outcome. However, percutaneous coronary intervention (PCI) for diffuse long lesion or complex chronic total occlusion (CTO) lesion may unavoidably require such procedure. Here, we report a case of catheter-induced iatrogenic coronary artery dissection (CICAD) during CTO PCI which was successfully treated with drug-coated balloon (DCB). **Case:** A 53-year-old male with multi-vessel coronary artery disease with concurrent right coronary artery CTO underwent PCI (Fig A). Under 6-french Amplatz-left 2 guiding catheter support, CTO lesion was predilated aggressively, and a single long DES was implanted (Fig B). However, an abruptly aggravated stenotic lesion with radiolucent area was noted at proximal right coronary artery where long-tipped guiding catheter was placed, indicative of CICAD (Fig B, arrowheads). To treat this, unplanned overlapping stenting with another long DES appeared unavoidable. CICAD, however, responded favorably to balloon angioplasty, thus we decided to treat it with DCB. Angiographic result after DCB angioplasty was acceptable (Fig C). At 1-year follow up angiography, DCB-treated lesion was patent without significant restenosis, though focal aneurysm was present (Fig D). **Discussion:** CICAD, a rare but fatal complication, can be managed conservatively in some cases, but usually requires bail-out stenting, or even surgery. Bail-out stenting for CICAD often results in unfavorable full metal jacket, which is associated with increased risk of in-stent-restenosis and stent thrombosis. DCB angioplasty is a novel approach that delivers antiproliferative drug to vessel without leaving foreign implants. DCB has proved efficacy in treating in-stent-restenosis and small vessel disease, and is currently widening its range of application in PCI. To our knowledge, this is the first report of bail-out DCB use for CICAD treatment. With DCB, we could treat CICAD successfully without creating an unplanned full-metal jacket. Further study evaluating role of DCB in diffuse complex lesion PCI is warranted.

