the setting of ongoing ischemia, which was relieved by coronary revascularization; 2. Left ventricular ejection fraction (LVEF) was, at the time of the acute event, 40% to 45% and subsequently recovered to normal. It is notable that in the large prospective Canadian registry including 750 SCAD patients, mean LVEF at presentation was 55%, and only 3.8% of patients had LVEF <35% (2). In case of persistent severely impaired LVEF following revascularization in a patient with SCAD, we would have first considered a wearable cardioverter defibrillator. If there was persistent LV dysfunction beyond 40 days due to large myocardial infarction, we would have then recommended an ICD as in any post-myocardial infarction patient. However, we acknowledge that, as stated in the 2018 American Heart Association SCAD scientific statement, the role of wearable cardioverter defibrillators as well as of ICD implantation in patients presenting with sudden cardiac arrest temporally related to ischemia has not been studied (3).

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Alternative treatment methods for spontaneous coronary artery dissection

To the Editor,

We have read the paper by Çimci et al. (1) with great interest. The authors presented a coronary artery dissection case treated using stent implantation in the mid-segment of the left anterior descending artery (LAD), which spread to the proximal segment (1). The dissection did not reach the left main coronary artery. According to the classification by Saw et al. (2), dissection was suitable for type 2A coronary artery dissection, and there was thrombolysis in myocardial infarction-1 flow. The first wire could not be advanced to the LAD. However, with the support of a microcatheter and olive tipped wire, wiring of the distal true lumen was achieved and confirmed. The stent was implanted in the mid-segment, but the intramural hematoma was spread to the proximal segment of LAD. In Video 1, the intramural hematoma advanced through the first diagonal artery, demonstrating the involvement of the proximal LAD by dissection. First, when spontaneous coronary artery dissection (SCAD) is required, the stent should be implanted at a distance of 5 mm to a proximal lesion. A decision should be made according to the distal lesion because, without lesion covering, dissection tends to be advanced in the proximal segment (3). In a case where it is not possible to cover the entire lesion by stent implantation, cutting balloon angioplasty with or without stenting may be considered. The balloon size should be at least 0.5 smaller than the caliber of the vessel being intervened. In particular, short cutting balloons of either 6 or 10 mm sizes with low inflation of 4 atm should be considered (3, 4). Second, because of the propagation of SCAD to the diagonal artery, a cutting balloon with or without stenting may be chosen as the primary treatment strategy, especially in the proximal part of the coronary arteries, such as the ostial LAD or circumflex artery SCAD. Third, if resources are limited in the catheter laboratory, plain ballooning using a buddy wire may be considered. Cutting balloon angioplasty with fenestration and decompression of the false lumen may be preferable to stent implantation for preventing proximal extension of an intramural hematoma and the need for a long stent (5). Intramural hematomas may be resolved with cutting balloon angioplasty; chronic total occlusion wires may be used as an alternative treatment strategy in SCAD (6).

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Author`s Reply

To the Editor,

We are thankful for the valuable comments on our case report (1). We agree that an adequate stent length exceeding the lesion length is important, as highlighted in the recent European Society of Cardiology (ESC) spontaneous coronary artery dissection (SCAD) position paper (2). In this case, we implanted the longest drug-eluting stent available (48 mm). However, that did not prevent proximal and distal hematoma propagation, and 2 additional stents were required (1). The point on cutting balloon angioplasty is well-taken, as this treatment modality has also been mentioned in the ESC SCAD position paper to reduce hematoma/dissection propagation during angioplasty/stent deployment and to reduce the length of the stented segments (2). Nevertheless, we did not embrace cutting balloon angioplasty for the SCAD indication as the overall published experience is limited to case reports (3). In a recently published Canadian SCAD cohort study including 750 patients, the cutting balloon technique was used only in 5 of the 103 patients who underwent percutaneous coronary intervention (PCI) (4). A major concern related to this technique is the fragility of the dissected arteries, which are at risk of rupture (5). The bottom line is that SCAD is a condition that rarely requires PCI. In cases that do, which by definition should be at high risk because of major ongoing ischemia refractory to medical treatment and/or hemodynamic/electrical instability, we should continue to follow the basic principles: 1) Focus on major vascular territories (proximal/mid-segments), 2) Ensure accurate intraluminal positioning of the wire, and 3) Stent implantation from healthy to healthy individual to reduce the probability of hematoma/dissection propagation.

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