CASE IMAGE

A rare complication due to forceful administration of contrast agent: Wire entry to the left ventricle cavity

Kontrast maddenin kuvvetli verilmesi nedeniyle oluşan nadir bir komplikasyon: Sol ventrikül boşluğuna tel girişi

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Department of Cardiology, University of Health Sciences, Koşuyolu Training and Research Hospital, İstanbul, Turkey A 50-year-old male patient with a history of hypertension and type 2 diabetes mellitus was admitted to the cardiology outpatient clinic because of chest pain. He had undergone percutaneous coronary

intervention once. An electrocardiogram showed normal sinus rhythm. Myocardial perfusion scintigraphy of the patient revealed 12% ischemia in the anterior wall, therefore the patient underwent coronary angiography, which revealed a chronic total occlusion (CTO) of left anterior descending artery (LAD), plaque formation in right coronary artery (RCA) and the circumflex artery (Cx) stent was patent (Figure 1A; Video 1*). Oral clopidogrel 75 mg/ day and acetylsalicylic acid 100 mg/day were prescribed to the patient, and a percutaneous intervention to LAD was scheduled for the following week. A floppy guidewire was advanced to the proximal region of the lesion and was exchanged with a Fielder XT (Asahi Intecc, Nagoya, Japan) wire by using a microcatheter. Then, without stabilizing the wire, the contrast agent was administered forcefully. The Fielder XT wire entered the left ventricular cavity through the septal artery (Figure 1B and C; Videos 2, 3, and 4*). No extravasation occurred when the wire was pulled back (Video 5*). Then, the CTO in the LAD was successfully opened during the procedure (Figure 1D; Video 6*). Echocardiography detected no pericardial effusion.

As experienced with this patient, care must be exercised during the administration of the contrast agent, and the wire should be stabilized/fixed, particularly when hydrophilic polymer-coated wires are used. Otherwise, we may encounter various complications, such as the penetration of the wire into the pericardium or heart cavities.

Written informed consent was obtained from the patient for publication of the article and the accompanying videos and images.

*Supplementary video files associated with this article can be found in the online version of the journal.



Figure 1. (A) Coronary angiography [anteroposterior cranial (APC) view] shows chronic total occlusion in LAD. **(B)** Coronary angiography (APC view) shows wire view in the septal artery. **(C)** The wire enters the left ventricle after forceful administration of the contrast agent. **(D)** Coronary angiography (APC view) shows an image of successful LAD percutaneous intervention.

