Two iatrogenic dissections during single percutaneous coronary intervention

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80-year old female patient, presenting with unstable angina, was transferred to our hospital from the regional hospital. Coronary angiography revealed separate ostia of the left anterior descending artery (LAD) and the circumflex artery (Cx). Borderline stenosis of the ostium of the LAD with tight stenosis of its middle segment as well as distal tortuosity was observed. Cx and right coronary artery (RCA) were without significant lesions. We decided to proceed with an ad hoc percutaneous coronary intervention in the middle segment of the LAD. During advancement of the guidewire (Terumo Runtrough NS Intermediate) dissection, in the region of the lesion, developed with a complete lumen closure. Patient became hypotensive with ST-segment elevation. Subsequent attempts to cross the dissection resulted in multiple disengagements of the guiding catheter (XB LAD, 6Fr) together with its prolapse to the proximal Cx. Eventually this resulted in the dissection with a partial lumen obstruction of the proximal part of the Cx. Because of it, the proximal part of Cx was directly stented and the guiding catheter was exchanged (JL 4,0, 6Fr). After that, we were able to cross the dissection of the LAD with a support of an OTW balloon (Terumo Ryujin Plus) and a hydrophilic guidewire with a tapered tip (Asahi Fielder XT). Appropriate positioning of the

OTW balloon in the true lumen was confirmed by the injection of the contrast through its lumen. Through the OTW balloon, whose extraction was found rather difficult using the 6 Fr system, standard guidewire (Terumo Runtrough NS Floppy) was introduced. After multiple balloon dilatations stent was successfully deployed in the middle segment of the LAD. Postprocedurally a rise in cardiac enzymes was observed, without electrocardiographic changes or angina. At follow-up, patient is well without any chest pain during daily activities.

KEYWORDS: coronary artery disease, dissection, guidewire, guiding catheter.

Received: 5th Mar 2013

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