Mechanism of Good Back-up Support With a Deep-Seated Guiding Catheter During Percutaneous Coronary Intervention

Kensuke Yokoi, MD; Isamu Mizote, MD, PhD;
Tatsuya Shiraki, MD; Seiko Ide, MD;
Tomohito Ohtani, MD, PhD;
Shungo Hikoso, MD, PhD; Yuji Ikari, MD, PhD;
Yasushi Sakata, MD, PhD

Although the attachment site of a guiding catheter (GC) in the contralateral side of the aortic wall is important for back-up force,¹ it is not clear how a deep-seated GC is positioned in the aorta. Computed tomography obtained during percutaneous coronary intervention (PCI)² showed how deep-seated GC were attached to the aortic wall.

An 85-year-old man with severe stenosis in the right coronary artery (RCA) underwent PCI. A 6-Fr JR4.0 was engaged to the RCA via the left radial artery (**Figure A**). To achieve good back-up support, the GC was deep-seated (**Figure B**). CT showed that the GC was twisted in a spiral (**Figure C–E**; **Supplementary Movie 1**).

A 66-year-old man with calcified stenosis in the left coronary artery (LCA) underwent PCI. A 6-Fr EBU4.5 was advanced from the left radial artery. The GC was deep-seated in the LCA (**Figure F,G**). CT showed that the GC was also twisted (**Figure H–J**; **Supplementary Movie 2**).

This imaging shows that a deep-seated GC is twisted

in the aorta and that long segments are attached to the aortic wall.

Disclosures

The authors declare no conflicts of interest.

References

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Supplementary Files

Supplementary Movie 1. Deep-seated JR4.0.

Supplementary Movie 2. Deep-seated EBU4.5.

Please find supplementary file(s):
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Department of Cardiovascular Medicine, Osaka University Graduate School of Medicine, Suita (K.Y., I.M., T.S., S.I., T.O., S.H., Y.S.); Department of Cardiology, Tokai University School of Medicine, Tokyo (Y.I.), Japan

Mailing address: Kensuke Yokoi, MD, Department of Cardiovascular Medicine, Osaka University Graduate School of Medicine, 2-2 Yamadaoka, Suita 565-0871, Japan. E-mail: yokoi@cardiology.med.osaka-u.ac.jp

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Figure. (**A,B,F,G**) Fluoroscopy and (**C–E,H–J**) 3-D computed tomography during percutaneous coronary intervention superimposed on (**C–E,H–J**) preoperative imaging. (**A**) Normally positioned and (**B**) deep-seated JR4.0; (**F**) EBU4.5 engaged in the left coronary artery with rotation manipulation; (**G**) deep-seated EBU4.5. AP, anteroposterior oblique; CRA, cranial oblique; LAO, left anterior oblique; RAO, right anterior oblique.