Successful Percutaneous Coronary Intervention to Single Coronary Artery From the Right Sinus of Valsalva

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A 89-year-old woman visited hospital with chest pain. Troponin T was rising (0.032 μg/mL). Twelve-lead electrocardiogram showed ST elevation in aVR and ST depression in V2–5, and these changes were improved by nitroglycerin. The patient was therefore diagnosed with unstable angina. Computed tomography angiography (CTA) showed a single coronary artery arising from the right coronary ostium (Figure A–C). The left coronary artery with a long transverse trunk crossed in front of the pulmonary artery (Figure B). The long left main coronary trunk had severe stenosis with rich plaque. Coronary angiography showed a lesion compatible with that seen on CTA (Figure D). We chose percutaneous coronary intervention (PCI) but not coronary artery bypass grafting because of the high STS score (6.385%) and emergency status. We selected Hearttrail® Ikari Left 4.0 (Terumo, Japan) to provide appropriate backup without injury. The drug-eluting stent was deployed (Figure E). After PCI, the symptom disappeared.

The present single coronary artery was type R-IIA according to Lipton classification; type R-II patients comprise 0.015% of the population. Only one report has previously described PCI for type R-IIA. The coronary lesion in that report was at the same position as in the present case. The turbulence might occur morphologically in this anomaly, impairing the vascular endothelium.

Disclosures
The authors declare no conflicts of interest.

References