Unexpected Atrial Septal Intramural Hematoma During Coronary Angiography
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Figure 1. (A) Left anterior oblique coronary angiography, showing severe stenosis (dotted red arrow) of the proximal right coronary artery (RCA). Contrast dye was extended to the atrial septum from the sinus node branch (yellow arrows) of the RCA. (B) Persistent contrast dye present in the wall of the corresponding atrial septum (pink arrows). (C, D) Apical 4-chamber transthoracic echocardiography, showing (C) development of a 14×17-mm echogenic mass (dotted orange arrow) compatible with an intramural atrial septal hematoma. (D) After 2 weeks, complete absorption of the intramural hematoma was seen. LA, left atrium; LV, left ventricle; RA, right atrium; RV, right ventricle.
A 68-year-old woman with hyperlipidemia was admitted to hospital due to angina pectoris. She had no history of connective tissue disease or autoimmune disease. She received combined therapy with aspirin (100mg/day) and clopidogrel (75 mg/day) before percutaneous coronary intervention (PCI), but did not receive anti-coagulant therapy. Coronary angiography showed severe stenoses of the proximal left anterior descending artery (LAD) and the right coronary artery (RCA). PCI was performed using a 6-Fr IL 3.5 Heartrail™ guiding catheter (Terumo, Japan) via the right radial artery. First, stent implantation was successfully performed using a 3.0-mm×24-mm Nobori stent™ (Terumo) for the proximal LAD. Next, PCI for the RCA was started in the same procedure, but during mechanical power injection (3.0ml/s) of contrast dye (6ml) using a 6-Fr IL 3.5 Heartrail™ guiding catheter without a side-hole for the RCA, contrast dye was unexpectedly extended to the atrial septum from the sinus node branch of the RCA without coronary dissection (Figure 1A). Localized contrast dye staining of the atrial septum remained (Figure 1B). The guiding catheter tip was positioned in the appropriate ostium of the RCA, and did not wedge in the coronary orifice without obstructing blood flow. The patient had no chest symptom and no change on electrocardiography. PCI was stopped and absence of pericardial effusion was confirmed on portable echocardiography. Embolization was not performed and the patient was conservatively treated. Transthoracic echocardiography immediately after the procedure showed normal left ventricular wall motion and no pericardial effusion but a low echoic mass (14×17 mm in dimension) in the atrial septum (Figure 1C). Serial echocardiography was carefully observed. Progression of the hematoma, other complications such as cardiac tamponade and heart block were not observed. Contrast-enhanced computed tomography (CT) showed the development of the atrial septal hematoma (ASH) without significant enhancement (blue arrows) and its anatomic relationships. (C) Axial and (D) longitudinal T1-weighted magnetic resonance imaging showing a mass with low signal intensity in the center and high signal intensity at the circumference (red arrows) in the atrial septum. The hematoma is localized in the atrial septum, and no extension of the hematoma is observed when compared with CT. Ao, ascending aorta; LA, left atrium; LV, left ventricle; RA, right atrium; RV, right ventricle.
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None.

References