A 40-year-old woman had left meningioma with right-sided weakness after tumor resection 3 months previously. She had no history of hypertension. At this time, she was admitted for recurrent tumor and received local radiotherapy. After admission, her blood pressure was in the normal range. During her hospitalization, sudden-onset severe chest pain with cold sweating was noted. An ECG revealed ST-segment depression in both the inferior and lateral leads. Her troponin I level rose to 8.4 ng/mL (normal value <0.03). The symptoms were aggravated within 3 hours and were associated with shock and respiratory distress. Endotracheal intubation and an inotropic agent were prescribed. A cardiologist was consulted who advised coronary catheterization under the impression of acute coronary syndrome. During the procedure, the patient’s aortic pressure was 140/30 mm Hg from the femoral sheath. The left arm pressure decreased to 82/37 mm Hg. Because of the wide pulse pressure, the aortography was injected to survey for aortic regurgitation. It showed a dissected flap from the aortic valve extending to the descending aorta with a narrow true lumen (Figure, A, white arrow; Figure, B, arrow; and Movie I in the online-only Data Supplement). A prolapsed right coronary cusp of aortic valve was seen (Figure, A, arrowhead). The severe aortic regurgitation was found by dense contrast in the left ventricle (Figure, C, arrowhead, and Movie II in the online-only Data Supplement). An emergent operation was arranged with aortic valve resuspension and coronary artery reimplantation. The patient survived the operation. A computed tomography scan showed that the dissection extended to the distal abdominal aorta (Figure, D). She was discharged 2 months later. A trace of her history showed that her brother had Marfan syndrome and died of aortic dissection several years previously. Before this episode, she had scoliosis, skin striae, and increasing upper segment ratio relating to Marfan syndrome.

Disclosures

None.
Figure. A, Aortography in the right anterior oblique view revealed a true lumen (white arrow), false lumen (black arrow), and prolapsed right coronary cusp of the aortic valve (arrowhead). B, Aortography in the left anterior oblique view revealed a narrow descending aorta resulting from dissection (arrow). C, Aortography showed severe aortic regurgitation with dense contrast in the left ventricle (arrowhead). D, Computed tomography scan showed aorta dissection with a flap (arrow) and scoliosis.
Aortic Dissection With Severe Aortic Regurgitation
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