Rapidly Progressive Infected Coronary Artery Aneurysm

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An 81-year-old woman presented to the emergency room with fever, anorexia, and malaise for the past 4 days. Emergency computed tomography (CT) revealed pleural and pericardial effusions (**Figure A**). Antibiotic therapy was started because methicillin-susceptible *Staphylococcus aureus* was detected in the pericardial fluid. After admission, contrast-enhanced CT on the 9th day showed an 11×13 mm coronary aneurysm with hematoma and abscess formation in the proximal right coronary artery (RCA) (**Figure B**), and she was diagnosed with infected coronary artery aneurysm (ICAA). On the 16th day, CT showed an enlarged pseudoaneurysm of 20×26 mm (**Figure C**). On the 30th day, after 4 weeks of antibiotic therapy, coronary angiography showed further enlargement of the pseudoaneurysm to 20×26 mm (**Figure D**). On the

35th day, the patient underwent ICAA resection and coronary bypass grafting (**Figure E,F**); postoperative CT shown in **Figure G**.

Although ICAA is rare, it is associated with high morbidity and mortality.¹ By evaluating the patient chronologically by CT, we could reveal expansion of the ICAA.

Disclosures

The authors declare no conflicts of interest.

Reference

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Figure. (A) Plain computed tomography (CT) on admission showing pleural and pericardial effusions. (B) Contrast-enhanced CT, on the 9th day of admission, showing an 11×13 mm coronary aneurysm with hematoma and abscess formation in the proximal right coronary artery (RCA) (white arrow). (C) Contrast-enhanced CT on the 23rd day of admission, showing a 20×26 mm coronary aneurysm in the RCA (white arrow). (D) Coronary angiography showing a 24×38 mm pseudoaneurysm in the RCA on the 30th day of admission (yellow arrowheads). (E) Infected coronary artery aneurysm (white arrowheads). (F) Incised infected coronary artery aneurysm (yellow arrowheads) and saphenous vein graft (white arrow). (G) Contrast-enhanced CT image after coronary bypass grafting.