





Successful conservative treatment of free-floating aortic thrombi: a case series

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Introduction: A free-floating thrombus is a mobile aortic thrombus that appears to float freely, while being attached at one end to the aortic wall. Although rare, it has 73% risk of embolic events¹. Etiologies include atherosclerosis, acute aortic syndrome, and hypercoagulability. Surgical thrombectomy and thrombolysis are the primary treatments in the acute setting², but clear management recommendations are lacking. Treatment depends on the clinical picture, patient condition and thrombus size and location.

Case series: We present three cases of free-floating aortic thrombi from 2021 to 2023. A 68-year-old male was hospitalized due to COVID19 pneumonia. Computed tomography angiography (CTA) of pulmonary artery revealed a floating thrombus in the distal ascending aorta, extending throughout the aortic arch. Spleen and renal infarction coexisted. A 65-year-old male presented with upper left abdominal pain. Computed tomography (CT) confirmed spleen infarction. Further imaging revealed floating thrombi in ascending aorta. Laboratory findings were positive for ANA, anti dsDNA, and anti UIRNP raising suspicion for collagenosis or vasculitis. A 70-year-old female was admitted with critical limb threatening ischemia. Laboratory testing revealed leukocytosis and thrombocytosis. CTA showed a floating thrombus in the infrarenal aorta extending into both common iliac arteries (**Figures 1 and 2**). A JAK2 positive myeloproliferative neoplasm was diagnosed. All patients were initially treated with low molecular weight heparin. The first patient was discharged on warfarin and two others on rivaroxaban. The third patient was additionally prescribed acetylsalicylic acid. Follow-up CTA showed complete resolution of thrombi in first two patients and complete resorption of the thrombi in iliac arteries and partial resorption in the

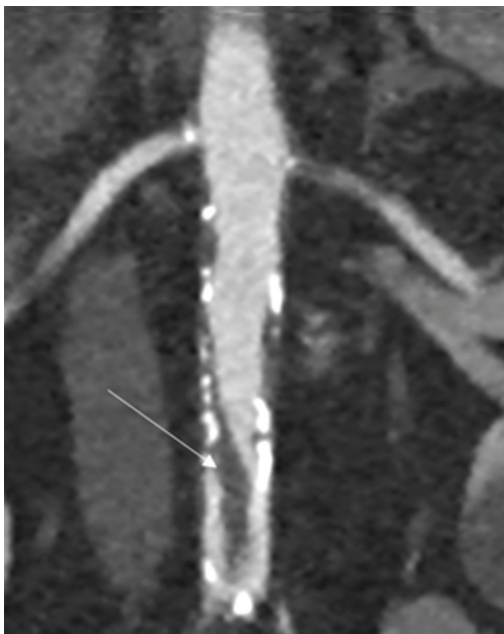


FIGURE 1. Computed tomography angiography showing floating thrombi in the infrarenal aorta of a 70-year-old female.

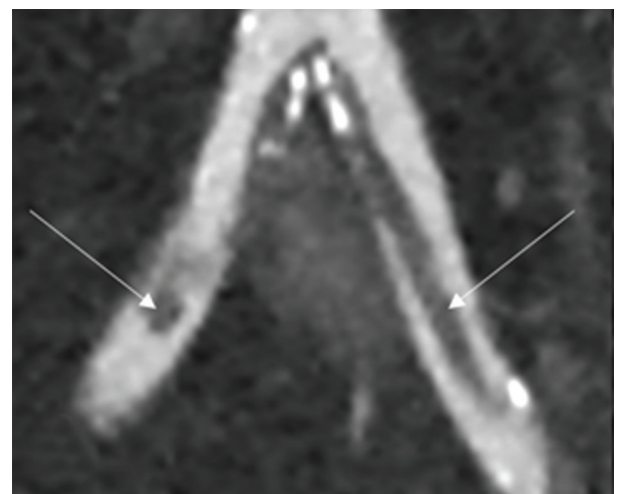


FIGURE 2. Floating thrombi extending into both common iliac arteries in the same patient.

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infrarenal aorta for the third one (**Figures 3 and 4**). All three patients underwent a full clinical recovery.

Conclusion: A conservative approach involving anticoagulation and management of cardiovascular risk factors can be effective regardless of underlying etiology.

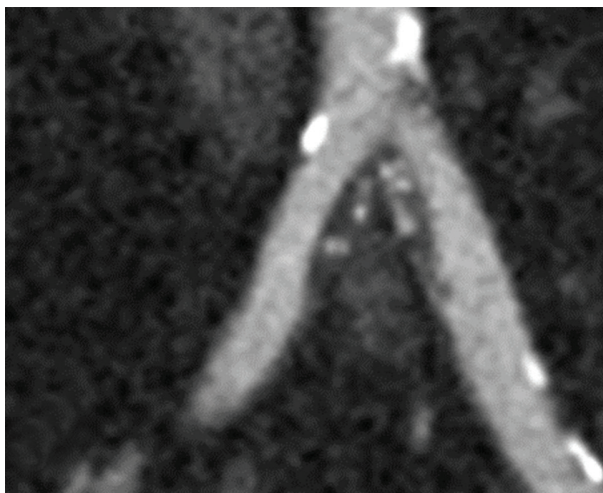


FIGURE 3. Follow-up scan showing resolution of thrombi in common iliac arteries.

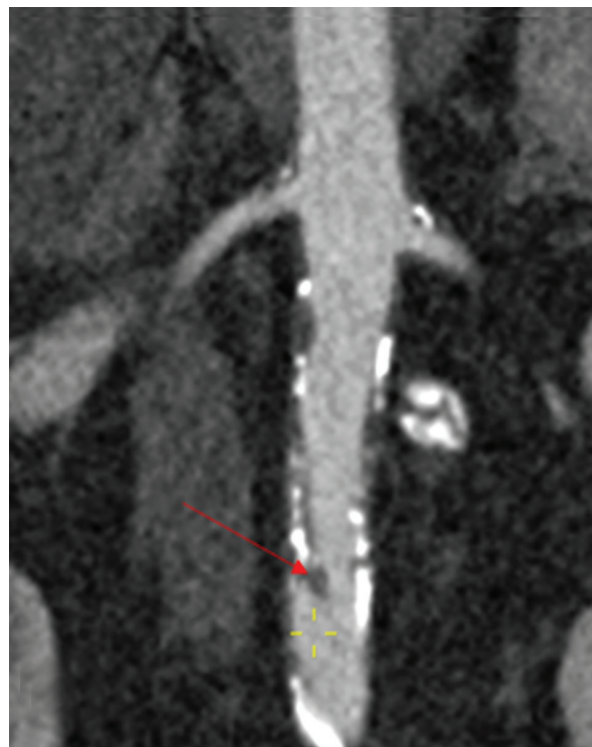


FIGURE 4. Only partial resorption of thrombi in the infra-renal aorta of the same patient.

LITERATURE

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