

Successful management of a brachial artery aneurysm with percutaneous intervention and one-month rivaroxaban therapy 🎬

A 39-year-old man presented to the emergency department with sudden onset of pain, coldness, and cyanosis in the distal phalanx of the right fifth digit. Fifteen years earlier, he had undergone surgical repair of a brachial artery (BA) injury due to a car accident. Physical examination revealed a surgical scar and mild swelling on the distal anterior right arm. The radial and ulnar arteries were palpable. Doppler ultrasonography of the right upper

extremity (RUE) showed an aneurysm of the BA with normal radial and ulnar flow and a thrombus in the aneurysm. Furthermore, computed tomography (CT) angiography of the RUE revealed a fusiform aneurysm measuring 45×20 mm, with a mural thrombus located at the mid-distal part of the BA (Fig. 1a-1c). The segments of the ulnar artery up to the wrist were normal, but it ended bluntly just before the palmar bifurcation. A digital embolus was diagnosed. The clinical course was evaluated by cardiovascular surgeons, and percutaneous intervention was performed. He underwent peripheral angiography of the RUE, and a FLUENCY stent of 6.0×80 mm was implanted (Fig. 2a, 2b; Supplementary Videos 1, 2). During hospitalization, low-molecular-weight heparin and dual antiagregan treatment were administered. On hospital day 5, he was discharged uneventfully on dual antiagregan and one month of rivaroxaban therapy. At one year follow-up, CT angi-

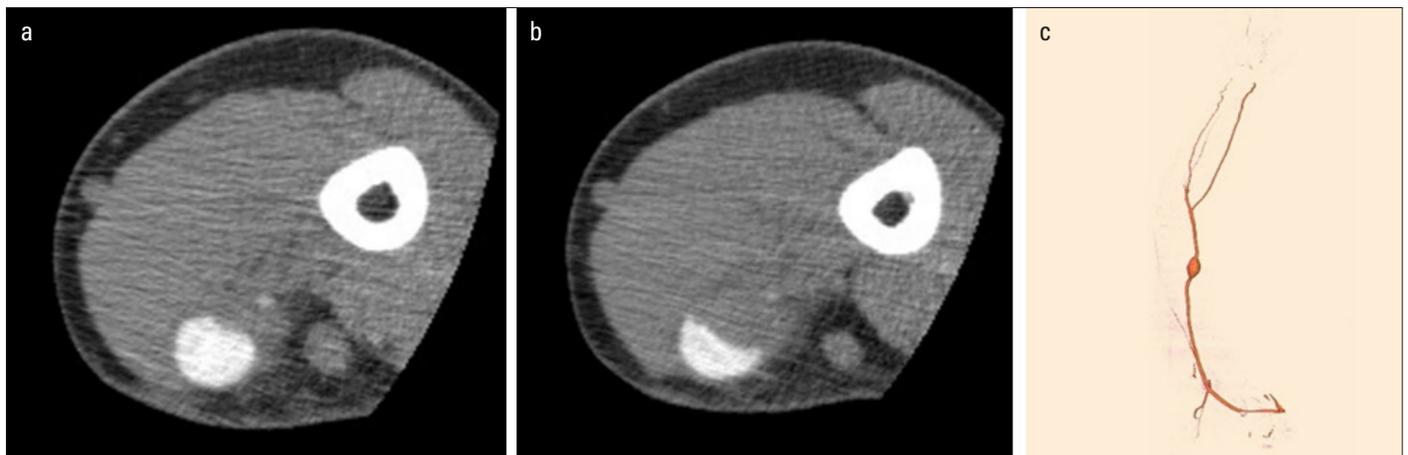


Figure 1. a-c. Computed tomography angiography of the right upper extremity revealing an aneurysm of the brachial artery with a mural thrombus (a, b). Three-dimensional computed tomography angiographic images showing the brachial artery aneurysm (c)

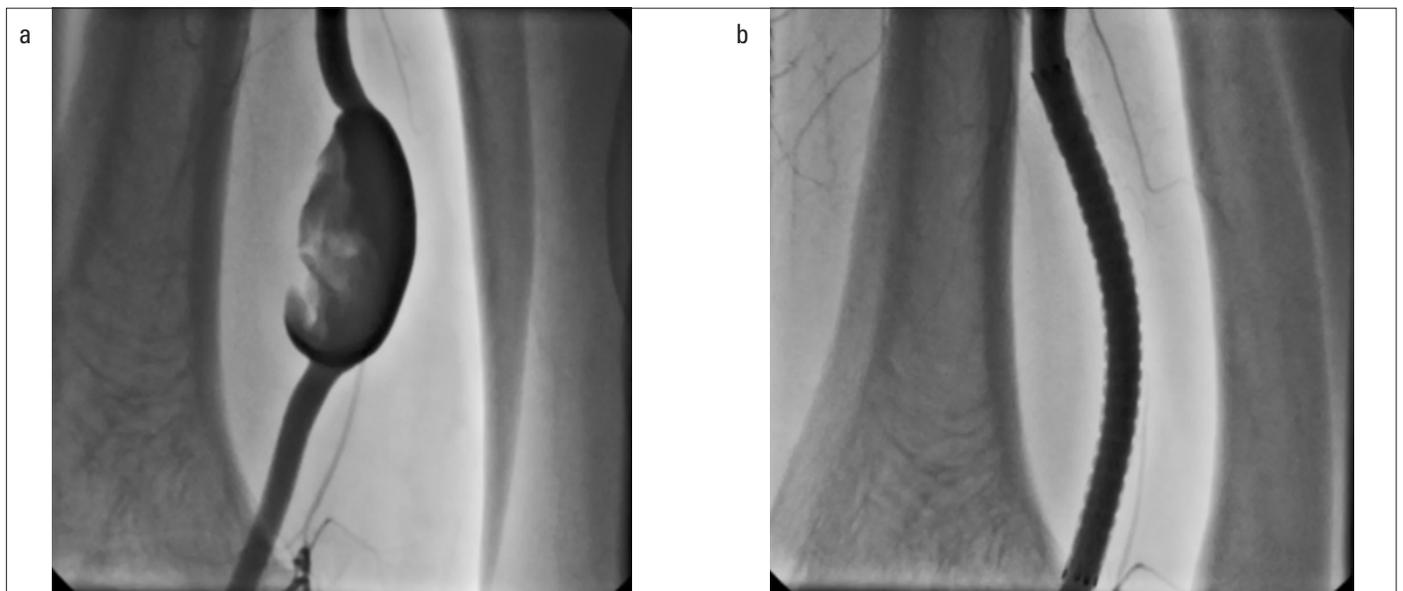


Figure 2. a, b. Peripheral angiography of the right upper extremity showing a fusiform aneurysm of the brachial artery (a). Peripheral angiography of the right upper extremity showing successful percutaneous intervention of the brachial artery aneurysm (b)

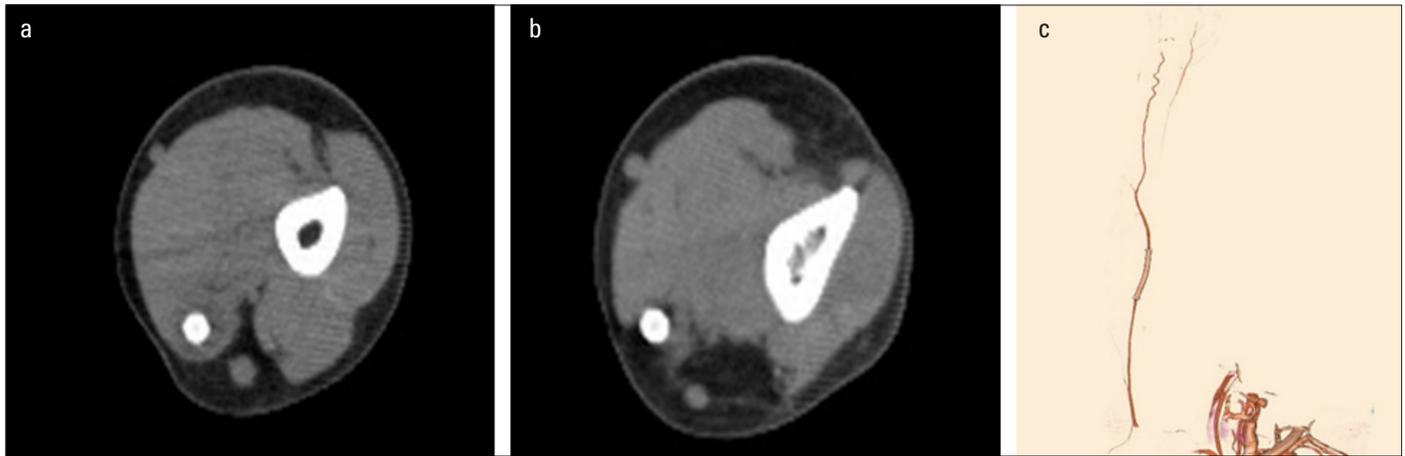


Figure 3. a-c. Computed tomography angiography of the right upper extremity revealing patency of the stent in the brachial artery (a, b). Three-dimensional computed tomography angiographic images showing patent stent in the brachial artery (c)

ography revealed that the stent was patent, and he was stable (Fig. 3a-3c).

BA aneurysms are rare and are caused by trauma, infection, and atherosclerosis or may be iatrogenic (1). Although surgery is the first line of treatment, percutaneous intervention can be possible for eligible patients (2).

Informed consent: Written informed consent was obtained from the patient.

References

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Supplementary Video 1. Peripheral angiography of the right upper extremity showing a fusiform aneurysm of the brachial artery

Supplementary Video 2. Peripheral angiography of the right upper extremity showing successful percutaneous intervention of the brachial artery aneurysm

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