Dear Editor,

Fungal endocarditis is an uncommon disease with a mortality rate of approximately 50%.1 Valvular vegetations are regularly encountered in fungal endocarditis and frequently embolize to end organs via small and medium-sized arteries; however, an embolus that is large enough to occlude the aorta is rare.2 In this report we describe a case of multiple emboli caused by aortic valve candidiasis in an immunocompromised patient with acute paraplegia due to an aortic occlusion.

A 65-year-old male with a history of hypertension, diabetes mellitus, and sigmoidectomy for an unresectable colonic polyp complicated by an abscess in the left lower quadrant with a colocutaneous fistula growing Candida tropicalis presented to our emergency department with sudden onset of bilateral leg pain and altered mental status. On examination, he had a reduced level of arousal with profound antalgic weakness, distal reduction in sensitivity to pin prick without a clear spinal level, normal deep tendon reflexes, and pulseless bilateral lower extremities. Blood tests revealed leukocytosis (22×10^9/L), thrombocytopenia (114×10^9/L), an international normalized ratio of 1.54, serum creatine kinase at 34,973 U/L, and serum lactate at 8.0 mmol/L. Magnetic resonance imaging of the entire spine excluded a spinal cord infarct and compression of the epidural cord. Computed tomography (CT) of the head showed scattered acute subarachnoid hemorrhage in bilateral cerebral hemispheres and an acute infarct in the territory of the right posterior cerebral artery. An abdominal CT aortogram revealed a fungal ball causing a complete focal occlusion of the infrarenal abdominal aorta along with splenic and bilateral renal infarcts (Fig. 1A).

Due to the patient’s profound lower extremity deficits, he received endovascular thromboembolectomy of bilateral aortoiliac vessels. A large amount of organized, thrombotic material was obtained and sent for pathological examination. Intraoperatively, a transthoracic echocardiogram showed a 2 cm×3 cm vegetation on the aortic valve. He received broad-spectrum antibiotics and systemic anticoagulation with heparin. Blood and urine cultures grew C. tropicalis, for which he was started on antifungal therapy with amphotericin. Microscopy of the thrombus revealed abundant yeast and pseudohyphal forms (Fig. 1B).

Infected endocarditis is a recognized complication of fungemia, with Candida spp. (C. albicans [44%], C. parapsilosis [27%], and C. tropicalis [10%]) detected in about two-thirds of cases worldwide.3 The most frequent risk factors associated with endocarditis due to Candida spp. include prosthetic valves, underlying heart disease with implantable devices, previous surgery, chemotherapy, prolonged usage of central venous catheters, and an immunocompromised state.4

Sudden paraplegia is commonly caused by compression of the spinal cord secondary to trauma, hematoma, abscess, or infarction from occlusion of the aorta or supplying arteries (the artery of Adamkiewicz and the supplementary arterial ansa of the conus).5 Acute aortic occlusion is an infrequent surgical emergency that can result from either in situ thrombosis or embolism from preexisting aortoiliac atherosclerosis. It is rare for septic emboli to occlude the aorta.6

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Acute aortic occlusion should be considered by the neurologist in the differential diagnosis of a patient who presents with the sudden onset of paraplegia, especially when this is associated with pain, pallor, or pulselessness.6,8 Emergency embolectomy is optimal for revascularization.6,8

In conclusion, the immunocompromised state of our patient following complicated intra-abdominal surgery with secondary candidemia ultimately led to fungal endocarditis and the acute occlusion of the aorta. Since the thrombus predominantly showed yeast and pseudohyphal forms, we concluded that the aortic occlusion was secondary to cardioembolism.

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