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LETTER TO THE EDITOR

Co-occurrence of Leriche syndrome and antiphospholipid syndrome in a man with refractory ulcers of the lower limbs



Dear Editor,

Leriche syndrome is a rare variant of atherosclerotic occlusive disease characterized by total occlusion of abdominal aorta and/or common iliac arteries.¹ The antiphospholipid syndrome is a prothrombotic disorder that can affect both venous and arterial thrombosis.² Co-occurrence of antiphospholipid syndrome and Leriche syndrome is extremely rare. Here, we report a male patient with refractory ulcers of the right foot; he received antibiotic therapy and surgical debridement during hospitalization, however, the ulcer wound did not heal well. The results of image study and laboratory data finally proved the above syndromes.

A 52-year-old male patient complained of chronic ulcer wound of the right foot without any trauma history. He also had claudication of the legs, body weight loss with a body mass index of 17.6 kg/m², and erectile dysfunction for many years. The physical examination revealed that his bilateral femoral pulses were absent. The extremities showed bilateral lower legs muscle atrophy, and an ulcer wound with peripheral tissue gangrene on the right foot and barely palpable pulses of bilateral dorsalis pedis arteries. He received empiric antibiotic therapy with oxacillin 2 g intravenous drip q. 6 hours and gentamicin 80 mg intravenous drip q. 12 hours for 7 days, and received local surgical debridement. The aerobic and anaerobic culture all revealed negative finding, however, the ulcer wound still did not heal. Computed tomography and angiography showed total occlusion of infrarenal abdominal aorta (Figure 1), and bilateral common iliac arteries with subsequent collateral circulation. Many small collateral vessels were reconstituted in the bilateral lower extremities. Antiphospholipid antibodies detected by enzyme-linked immunosorbent assay showed 640 RU/mL (positive), and the anticardiolipin immunoglobulin G detected by lupus

anticoagulant assays showed >160 µg/mL (positive). The patient was diagnosed as Leriche syndrome co-occurring with antiphospholipid syndrome. He was discharged with a treatment plan for antiphospholipid syndrome and recommendation to receive aorta and common iliac arterial revascularization.

The diagnosis of Leriche syndrome includes a triad of claudication, impotence, and absence of femoral pulses due to chronic large blood vessels occlusion.^{1,3,4} Unlike Kawasaki disease, which is caused by vasculitis of coronary arteries,⁵ Leriche syndrome is due to the atherosclerotic changes in the aorta or common iliac arteries.^{1–4} Antiphospholipid syndrome commonly involves the deep veins of the lower limbs, the cerebral arterial circulation, and placenta due to vascular thrombosis. However, any tissue or large vascular bed can be affected.^{2,4} The term *antiphospholipid antibodies* include anti-β₂-glycoprotein detected by enzyme-linked immunosorbent assay or anticardiolipin antibodies detected by lupus anticoagulant assays.² A diagnosis of the antiphospholipid syndrome is made if at least one of the above clinical criteria and one of the laboratory criteria are met.²

Standard therapy of Leriche syndrome is surgical revascularization. Keller et al¹ reported a 56-year-old man with co-occurrence of Leriche syndrome and dilated cardiomyopathy; the patient was successfully treated with antihypertensive drugs, an implanted defibrillator, and surgical reconstruction of the abdominal aorta. Toffon et al⁴ reported a patient with lower limb ischemia due to aortoiliac thrombosis related to antiphospholipid syndrome, and that he has also successfully been treated with a combination of medical and surgical therapy. The relationship of Leriche and antiphospholipid syndrome has been unclear until now. Clinicians should be aware that a refractory ulcer wound of the lower limbs may be due to large vessel occlusion such as Leriche syndrome.

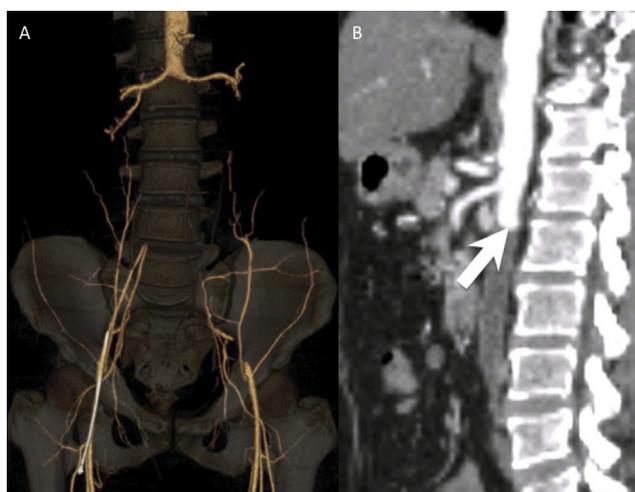


Figure 1. (A) Computed tomography and (B) angiography of the abdomen revealed total occlusion of infrarenal abdominal aorta (arrow showing the site of occlusion) and bilateral common iliac arteries, with collateral circulation in the pelvic cavity.

Conflicts of interest

All contributing authors declare no conflicts of interest.

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