

A Case of Leriche Syndrome

Sookyong Song, Wan-Hee Yoo

*Division of Rheumatology, Department of Internal Medicine,
Chonbuk National University Medical School and Research Institute of Clinical Medicine, Jeonju, Korea*

Case Report

Patient: 36-year-old male

Chief complaint: Pain and intermittent claudication of both lower extremities for 5 years

Physical examination: At admission, blood pressure of 120/100 mmHg, body temperature of 36.8°C, pulse of 68/min and respiratory rate of 19/min were checked. His femoral pulses were absent in both lower extremities accompanying pallor and coldness. The ankle-brachial index (ABI) was reduced (Rt. 0.77 and Lt. 0.49).

Past medical history: He had hypertension, but not dyslipidemia or diabetes mellitus.

Laboratory tests: Laboratory test revealed white blood cell (WBC) of $10.09 \times 10^3/\text{mL}$, Hb of 14.8 g/dL and platelet of $25 \times 10^3/\text{mL}$. Erythrocyte sedimentation rate (ESR), CRP, blood chemistries and autoantibodies and tests for viral infections were within normal limit or all negative.

Radiologic findings: Computed tomography (CT) angiography showed complete occlusion of infrarenal aorta and left common iliac artery with collaterals into right common iliac and left external iliac artery (Fig. 1).

Diagnosis and treatment: A diagnosis of Leriche syndrome was made with characteristic clinical symptoms, including ischemic pain and intermittent claudication of both lower extremities and radiographic findings. He denied to operative treatment of aorto-iliac and aorto-femoral graft bypass sur-

gery. Thus he has been treating with antihypertensive and anti-platelet drugs.

Discussion

We here present an unusual case of a Leriche syndrome in a young male with ischemic pain and intermittent claudication of both lower extremities. Aortoiliac occlusive disease, also known as Leriche syndrome, was first described by Leriche and Morel in 1940 (1). This is an atherosclerotic occlusive disease characterized by complete occlusion of the infrarenal aorta with the clinical tetrad of absent femoral pulses, intermittent claudication, gluteal pain and impotence. The main cause of this syndrome is an atherosclerotic occlusion of aortoiliac arteries. It typically begins at the distal aorta or common iliac artery origins, and slowly progresses proximally and distally over time. Although progression is quite variable, it may ultimately extend to the level of the renal arteries or result in total aortic occlusion (2).

The resulting narrowing of the distal aorta and iliac arteries decreases blood flow to the pelvis and lower extremities, thereby causing symptoms such as pain, claudication, and impotence commonly seen in affected males. The clinical symptoms may vary according to the level of occlusion and number of vascular collaterals developed. A prompt diagnosis is important for both extremity salvage and prognosis of this disease. Duplex sonography and ankle brachial Index is a non-invasive, inexpensive and reliable method to screen the patients (3). Serial CT angiogram is the method of choice for the diagnosis and exact localization of arterial occlusion. In the present patient, characteristic occlusion of infrarenal aorta with collaterals were demonstrated.

Treatment of acute Leriche syndrome is mostly invasive operative method. Although intraarterial thrombolysis might be considered option in cases of mild ischemia, open-surgical techniques are optimal therapy with the aim to reduce amputa-

<Received : January 27, 2012, Accepted : February 10, 2012>
Correspondence: Wan-Hee Yoo

Division of Rheumatology, Department of Internal Medicine, Chonbuk National University Medical School and Research Institute of Clinical Medicine, San 2-20, Geumam-dong, Deokjin-gu, Jeonju 561-180, Korea
E-mail: ywhim@jbn.u.ac.kr

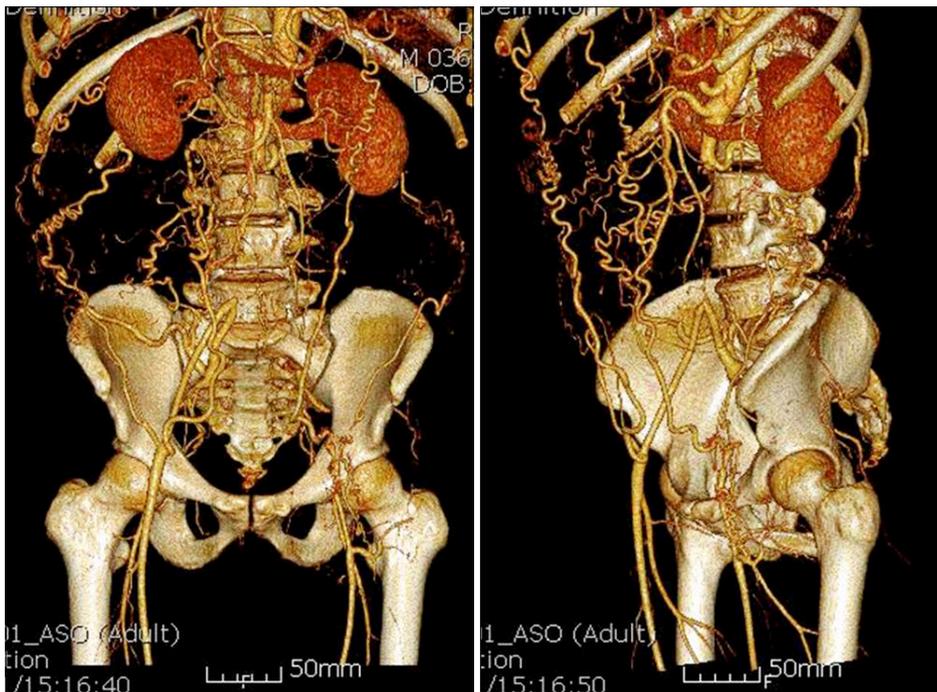


Figure 1. Computed tomography angiography at the initial presentation, showing completely occluded infrarenal aorta and left common iliac artery with collaterals.

tion rate and mortality (4). Traditional operative management for this syndrome is aortoiliac endarterectomy and aortobifemoral bypass.

References

1. Leriche R, Morel A. The syndrome of thrombotic obliteration of the aortic bifurcation. *Ann Surg* 1948; 127:193-206.
2. Imparato AM, Kim GE, Davidson T, Crowley JG. Intermittent claudication: its natural course. *Surgery* 1975;78:795-9.
3. Diehm C, Schuster A, Allenberg JR, Darius H, Haberl R, Lange S, et al. High prevalence of peripheral arterial disease and co-morbidity in 6880 primary care patients: cross-sectional study. *Atherosclerosis* 2004;172:95-105.
4. Storck M, Wagner HJ. Peripheral arterial obstruction and acute lower limb ischemia. *Chirurg* 2007;78:611-9.