

## A Case of Acute Kidney Injury Associated with Leriche Syndrome

Sayuri Kawasaki<sup>1</sup>, Takashi Tani<sup>1</sup>, Shoko Haraguchi<sup>1</sup>,  
Toshiki Funakoshi<sup>1</sup>, Akiko Mii<sup>1</sup>, Tetsuya Kashiwagi<sup>1</sup>,  
Jiro Kurita<sup>2</sup>, Yukinao Sakai<sup>1</sup> and Yosuke Ishii<sup>2</sup>

<sup>1</sup>Department of Nephrology, Nippon Medical School, Tokyo, Japan

<sup>2</sup>Department of Cardiovascular Surgery, Nippon Medical School, Tokyo, Japan

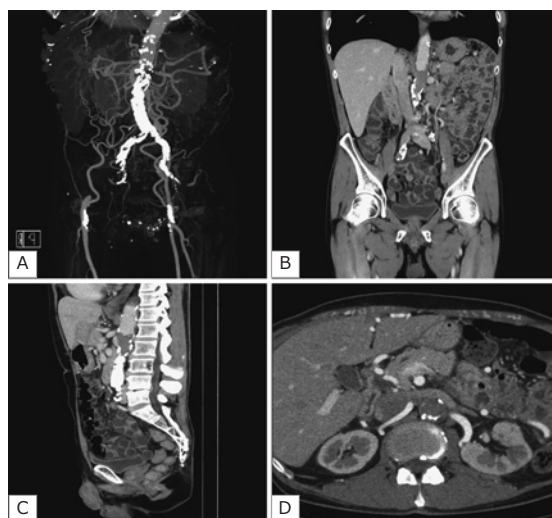


Fig. 1

Leriche syndrome is an aortoiliac occlusive disease with three chief symptoms: claudication, impotence, and weak femoral pulse. It can also cause occlusion of the aorta up to the level of the renal arteries. We report a case in which aortoiliac bypass and renal artery thrombectomy were effective in ameliorating acute kidney injury caused by bilateral renal artery thrombosis.

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**Key words:** Leriche syndrome, acute kidney injury, renal artery thrombosis

A 70-year-old male smoker with a history of hypertension and dyslipidemia presented with a chief complaint of back pain and renal dysfunction (serum creatinine 1.86 mg/dL). Enhanced computed tomography revealed total occlusion of the abdominal aorta from the renal arteries to the bilateral common iliac arteries (Fig. 1), which led to a diagnosis of Leriche syndrome<sup>1,2</sup>. The renal dysfunction progressed rapidly, and surgery was scheduled when the patient's serum creatinine reached 4.18 mg/dL. Preoperative examination indicated that the worsening renal dysfunction was due to the expansion of the renal artery thrombus, so renal artery thrombectomy and abdominal aorta-external iliac artery (EIA) bypass were performed. Renal function improved rapidly after surgery (serum creatinine 1.59 mg/dL). Renogram findings also improved, and renal artery ultrasonography showed alleviation of the renal artery stenosis (Fig. 2).

**Conflict of Interest:** The authors have no conflicts of interest to declare.

Correspondence to Yukinao Sakai, Department of Nephrology, Nippon Medical School, 1-1-5 Sendagi, Bunkyo-ku, Tokyo 113-8602, Japan

E-mail: y-sakai@nms.ac.jp

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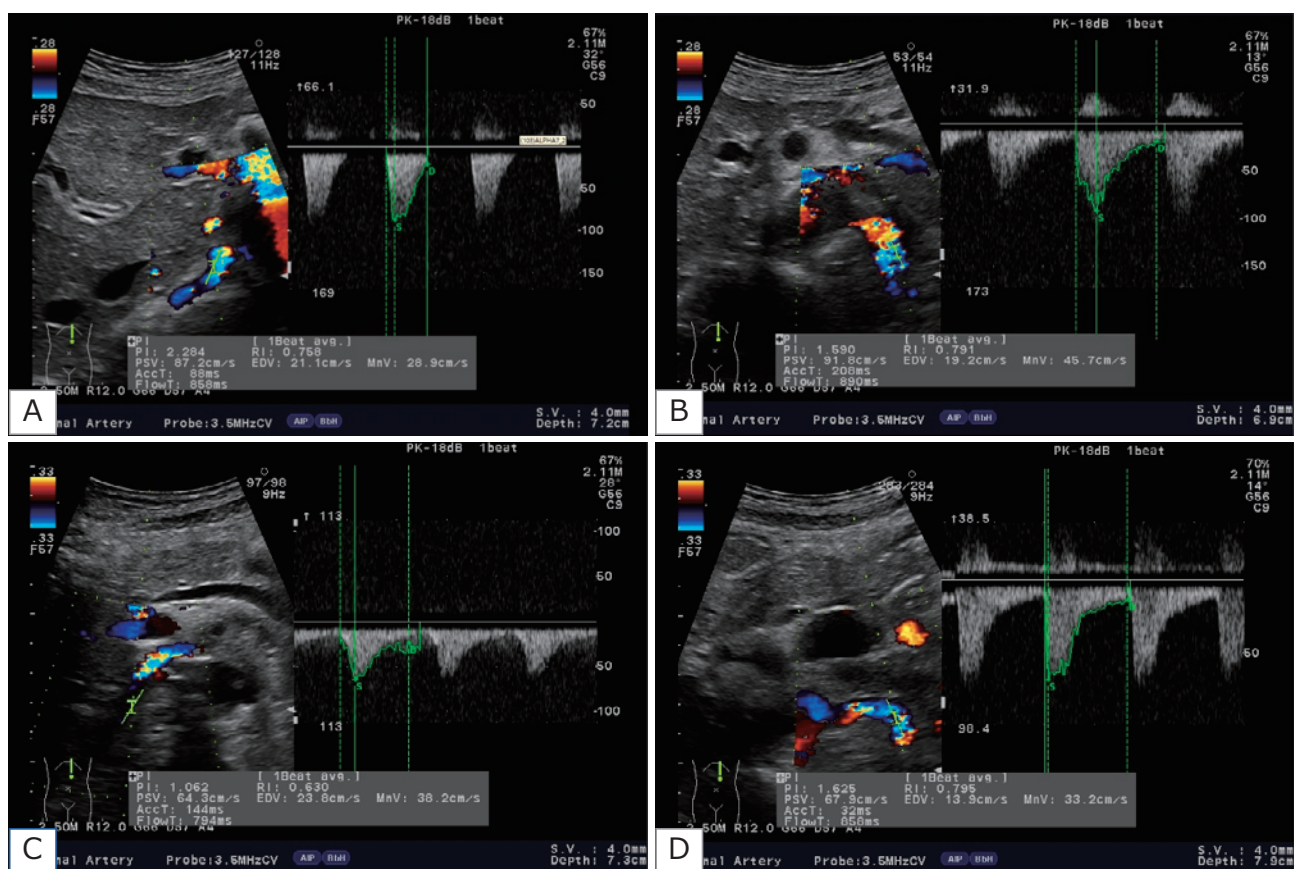


Fig. 2

- Fig. 1** Severe calcification of the abdominal aorta and bilateral external iliac arteries (A). Computed tomography showing aortic thrombosis at the level of the renal arteries (B, C, D).
- Fig. 2** Pre-operative doppler ultrasound showing loss of early systolic peak (ESP) in the bilateral renal arteries (A, B). Acceleration time (AT) was 88 msec in the right artery (A), and 208 msec in the left (B). The images show bilateral renal artery stenosis. Post-operative doppler ultrasound reveals loss of ESP in the left renal artery (D). AT was 144 msec in the right artery (C), and 32 msec in the left (D), with greater improvement in the left renal artery than in the right.

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