

Medical Imagery

Elderly Man with Left Leg Pain

Chi-Heng Lee, Wei-Jing Lee *

Department of Emergency Medicine, Chi-Mei Medical Center, Tainan 710, Taiwan

ARTICLE INFO

Accepted 10 July 2020

A 73-year-old man presented to the emergency department with worsening left lower limb pain and discoloration for 5 days. Medical history included aortic aneurysm, hypertension and old ischemic stroke. Physical examination showed left foot cyanotic change with bullae formation, and absent pulsation of posterior tibial and dorsalis pedis arteries. Arteriography of low extremities revealed total occlusion of bilateral external iliac arteries and left posterior tibial artery. The emergency physician performed the point-of-care (POCUS) ultrasound of the abdomen (Figure 1a) and revealed abdominal aortic aneurysm measured 7 cm with intraluminal echogenic materials and absence of color Doppler flow (Figure 1b). Computed tomography (CT) angiography of the chest was obtained and subsequently confirmed infrarenal abdominal aortic aneurysm with mural thrombosis and complete occlusion of bilateral iliac arteries mimicking Leriche syndrome, or aortoiliac occlusive disease (Figure 1c).

Leriche syndrome, or aortoiliac occlusive disease, is characterized by atherosclerotic occlusions of the abdominal aorta above bifurcation. The typical symptoms include claudication of lower extremities, erectile dysfunction and absent or diminished femoral pulses.¹ Emergency point-of-care ultrasound (POCUS) is an effective, rapid and non-invasive screening tool for differentiating vascular emergent conditions such as abdominal aortic dissection, aneurysm or occlusion.² CT angiography provides direct anatomic location and degree of collateralization. Development of collateral arterial pathway is a hallmark sign of chronic obstruction seen with Leriche syndrome. Treatment with surgical revascularization for Leriche syndrome include thromboendarterectomy (TEA), aortobifemoral bypass (AFB). Percutaneous transluminal angioplasty (PTA) and stenting is the other interventional choice for those who have multiple comorbidities.³ In our case the ischemic change of the left lower limb may be related to infrarenal abdominal aortic aneurysm with mural thrombosis and occlusion of bilateral iliac arteries mimicking Leriche syndrome or aortoiliac occlusive disease with different pathophysiologic process. Mortality rates are high up to 59% if not treated and thrombectomy followed by aortic reconstruction is the optimal surgical procedure for patient with acute thrombosis of abdominal aortic aneurysm.⁴ Surgical intervention is suggested but patient pre-

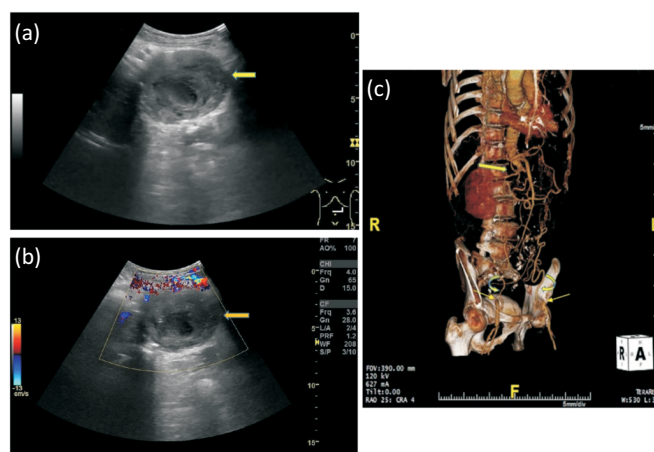


Figure 1. (a) Ultrasound of the abdomen with the convex transducer in transverse orientation: aneurysmal dilatation of the abdominal aorta measured approximately 7 cm with intraluminal echogenic materials with absent color Doppler flow. (b) Ultrasonography of the abdomen with color Doppler, demonstrating absence of color flow in the abdominal aorta (bold arrow). (c) CT-scan of the abdominal aorta: The 3D-volume rendering image shows complete occlusion of the infrarenal abdominal aortic aneurysm (bold arrow) and bilateral iliac arteries (arrow). The vascularization of bilateral iliac arteries is maintained by collateral pathway such as inferior epigastric artery (curved arrow).

ferred hospice care and died two months later.

Conflict of interests

Denied.

References

1. Lee WJ, Cheng YZ, Lin HJ. Leriche syndrome. *Int J of Emerg Med.* 2008; 1(3):223.
2. Roxas R, Gallegos L, Bailitz J. Rapid detection of aortic occlusion with emergency ultrasonography. *Ann Emerg Med.* 2011;58(1):21–23.
3. Keller K, Beule J, Balzer JO, et al. 56-year-old man with co-prevalence of Leriche syndrome and dilated cardiomyopathy: case report and review. *Wien Klin Wochenschr.* 2014;126(5–6):163–168.
4. Suliman AS, Raffetto JD, Seidman CS, et al. Acute thrombosis of abdominal aortic aneurysms: report of two cases and review of the literature. *Vasc Endovascular Surg.* 2003;37(1):71–75.

* Corresponding author. Department of Emergency Medicine, Chi-Mei Medical Center, No. 901, Zhonghua Road, Yongkang District, Tainan 710, Taiwan.

E-mail address: echolee1103@gmail.com; ooleo76@gmail.com (W.-J. Lee)