

LETTERS TO THE EDITOR

Regarding “Congenital anomaly of the external iliac artery: A case report”

We read with great interest the report by Koyama et al¹ entitled “Congenital anomaly of the external iliac artery: A case report.” In their report, the authors alluded to, but were not able to visually confirm, the course of the external iliac artery within the pelvis. We recently encountered a patient who had a similar external iliac artery anatomy to that described by the authors, discovered incidentally on computed tomography (CT).

A 37-year-old man underwent a CT scan for assessment of left inguinal lymphadenopathy. On CT, the right common femoral artery

was in continuity with a dilated internal iliac artery, and no external iliac artery was observed, an appearance similar to the author’s surgical findings (Fig 1). Additionally, the dilated internal iliac artery runs a deep and circular course into the pelvis, cranial to the urinary bladder, and adjacent to small bowel loops. The anterior and posterior divisions of the internal iliac artery arise from a single trunk at the level of the superior margin of the right acetabulum (Fig 2). The appearance is similar to the angiographic appearance of the described case; in Fig 1,¹ the anterior division of the patient’s left internal iliac artery can be seen arising from the same location. Similarly, there was no evidence of a persistent sciatic artery on the CT scan. Besides a retro-aortic left renal vein, there was no other vascular variant of note.

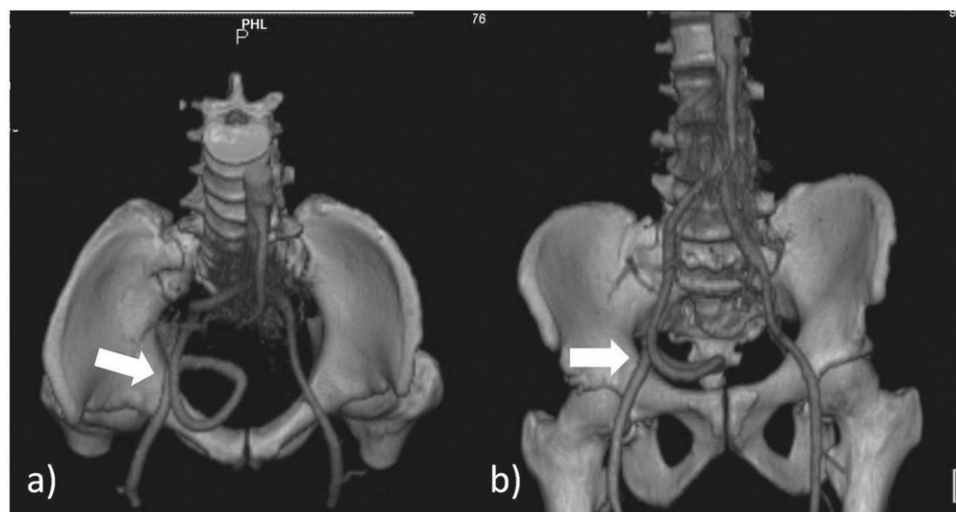


Fig 1. Volume-rendered images of the iliac arteries. **a**, “Pelvic inlet” view. **b**, Frontal view. The right common femoral artery is seen in continuity with a dilated internal iliac artery that runs a deep circular course within the pelvis (*white arrows*). The external iliac artery is absent and no persistent sciatic artery is seen.



Fig 2. Maximal-intensity projection over the pelvis, showing both the anterior and posterior division of the internal iliac artery to arise over the level at the superior margin of the right acetabulum. This is similar to the angiographic appearance in the described case (left internal iliac artery branches in Fig 1¹).

We agree with the authors that this variant is likely a Tamisier group 1 or 3 disorder,² and the key feature of which is the association with chronic ischemia (absent in our patient). Our case illustrates the deep pelvic course of such a variant vessel, posing a potential surgical challenge. While such rare variants were previously considered anatomic curiosities, their significance is likely increased with the era of endovascular therapy in which femoral and iliac accesses are commonplace.

Uei Pua, MD
Lawrence HH Quek, MD

Department of Diagnostic Radiology
Tan Tock Seng Hospital
Singapore

REFERENCES

1. Koyama T, Kawada T, Kitanaka Y, Katagiri K, Ohno M, Ikeshita M, et al. Congenital anomaly of the external iliac artery: a case report. *J Vasc Surg* 2003;37:683-5.
2. Tamisier D, Melki JP, Cormier JM. Congenital anomalies of the external iliac artery: case report and review of the literature. *Ann Vasc Surg* 1990;4:510-4.

doi:10.1016/j.jvs.2011.01.080