Congenital absence of bilateral common iliac arteries

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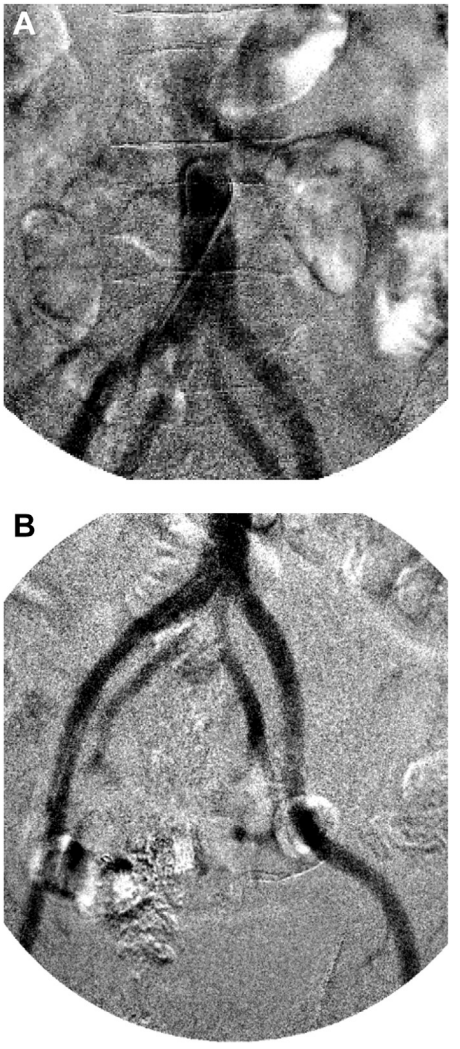
The common iliac arteries originate at the body of the fourth lumbar vertebra and bifurcate after approximately 5 cm into the external and internal iliac arteries. Anomalies of the iliac arteries are rare, with a reported incidence of only 6 in 8000 patients.[1] We present a case of a 66-year-old man with a history of diabetes and hypertension who presented with an ischemic left foot wound. Preoperative aortoiliac imaging studies were not obtained because the patient had palpable bilateral femoral pulses. Aortoiliac angiography demonstrated the absence of bilateral common iliac arteries (*A* and *B*/Cover). The aorta terminated into two internal and two external iliac arteries. The left external iliac artery was cannulated, and the remainder of the case was uneventful.



The congenital absence of bilateral common iliac arteries has been described once after incidental finding on autopsy[2] and once intraoperatively during a placenta accreta case requiring internal iliac artery ligation for hemorrhage control.[3] Other case reports have described the unilateral absence of common iliac arteries with various symptoms depending on the presence of in-line flow to the femoral artery.[4,5] The absence of a common iliac artery has been described with an associated absence of the ipsilateral external iliac artery. In that case, collateral branches from the ipsilateral internal iliac artery had reconstituted the common femoral artery.[4] No other arterial variations were identified in this case. To the best of our knowledge, this is the only angiographic image demonstrating the absence of bilateral common iliac arteries in the literature. This rare anatomic variant will likely just be an incidental finding, but it could have clinical implications if a distal landing zone for endovascular aortic aneurysm repair or covered endovascular reconstruction of an aortoiliac bifurcation for occlusive disease is required. The patient provided written informed consent for the description of his case before submission of our report.

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