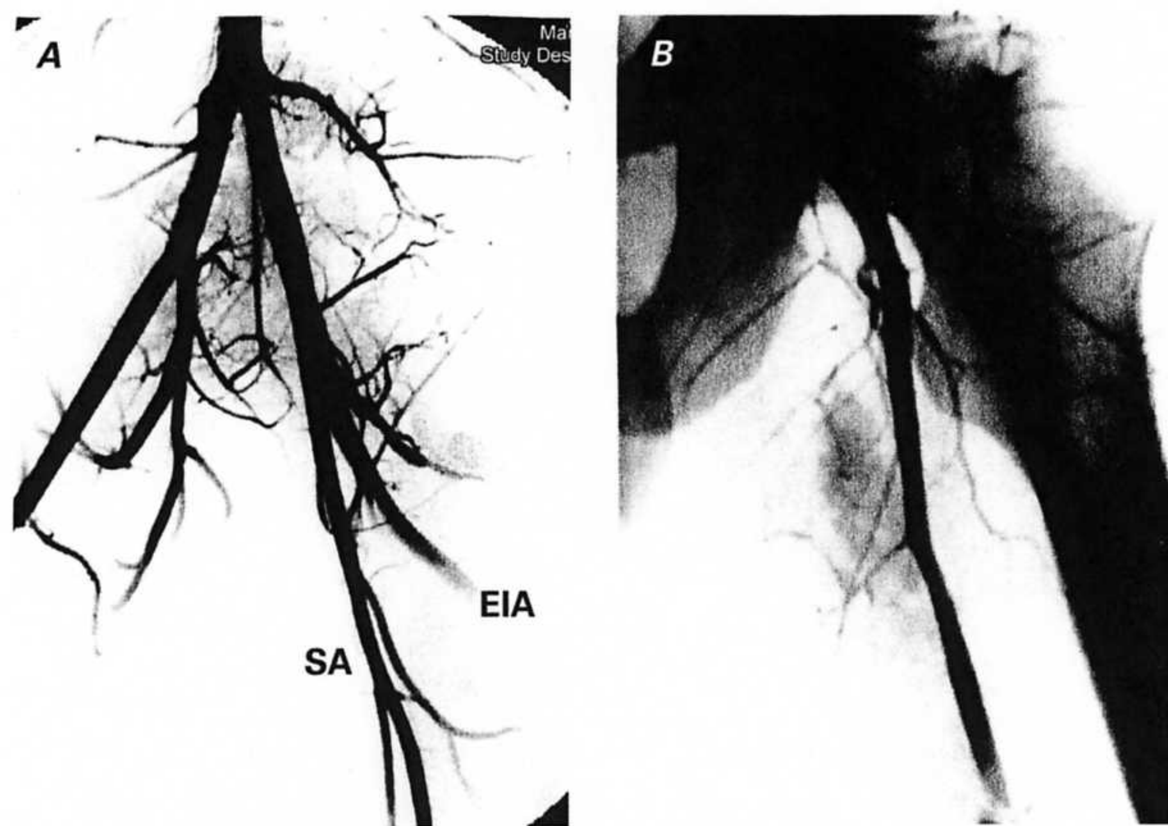

Fig. 1 *Arteriography shows* ***A)*** *a large, persistent left sciatic artery; and* ***B)*** *extravasation of the sciatic artery as a result of penetrating trauma with distal occlusion.*

EIA = external iliac artery; SA = sciatic artery

dence of about 0.05%, the sciatic artery persists as a rare vascular anomaly that can be classified into 2 clinical types—"complete" or "incomplete"—on the basis of its relationship with the femoral artery.[8-10] In the complete type, the SFA is hypoplastic, and the sciatic artery continues to the popliteal artery as a large vessel, without diminution. The sciatic artery runs through the greater sciatic foramen below the piriformis muscle to enter the thigh, inferior to the gluteus maximus, and courses alongside the sciatic nerve, sometimes within the neural sheath. It then dives posterior to the greater trochanter along the posterior aspect of the adductor magnus into the popliteal fossa, becoming the popliteal artery. This complete form of persistent sciatic artery—the more common of the 2 variants—occurs in approximately 75% of identified instances.[10-11] In the rarer, incomplete type, the SFA remains the dominant inflow vessel into the popliteal artery, and the sciatic artery becomes hypoplastic in the thigh.

Our patient had the complete form of persistent sciatic artery, with a large anomalous vessel that became the popliteal artery and a rudimentary SFA that supplied collateral vessels to the popliteal artery (Fig. 2). Endovascular stenting proved a simple, expeditious, and minimally invasive solution to what would have been a difficult surgical problem. Had the endovascular treatment been unavailable, surgery would likely have entailed a transgluteal approach to proximal sciatic artery ligation, a lateral popliteal approach to ligation of the distal sciatic artery, and femoral–popliteal bypass with use of a standard 6-mm polytetrafluoroethylene (PTFE) prosthesis.

Although several complications can occur due to persistent sciatic artery, aneurysmal formation is the most common. Our patient had no aneurysm, but his traumatic sciatic artery injury nevertheless posed an interesting vascular challenge. After his acute vascular circumstance was alleviated, the ideal management would have been continued ultrasonographic surveillance of his sciatic artery, to watch for aneurysmal development and to ensure proper stent positioning. Unfortunately, this was not possible with this patient, who was lost to follow-up.

A sciatic artery aneurysm is distinguished from a gluteal artery aneurysm, which requires only ligation or endovascular thrombosis. Aneurysmal formation in the