

Peronea arteria magna

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A 10-year-old girl was evaluated with MR angiography for left lower extremity varicosities. The arterial phase MIP (Fig. 1) demonstrated an incidental peronea arteria magna (PAM) of the right calf and a conventional left trifurcation (AT anterior tibial artery, P peroneal artery, PT posterior tibial artery).

Anomalous branching of the trifurcation results in a dominant peroneal artery in 7–12% of the population, and PAM, in which the peroneal artery is the only vascular supply to the foot, occurs in 0.2–5.3% [1, 2]. Patients with congenital or acquired peroneal arterial dominance, especially PAM, are at risk of foot ischemia if this vessel is traumatized, affected by stenocclusive disease, or harvested as part of a free fibular graft. Preharvest imaging, such as with MR angiography, has been advocated because patients with peroneal arterial dominance can have normal distal pulses [1].

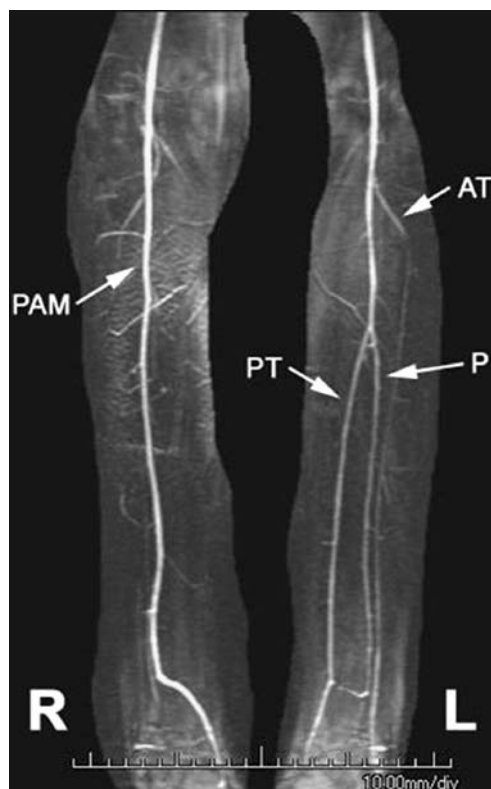


Fig. 1 Arterial phase MIP of the lower extremities

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References

1. Lohan DG, Tomasian A, Krishnam M et al (2008) MR angiography of lower extremities at 3 T: presurgical planning of fibular free flap transfer for facial reconstruction. *AJR* 190:770–776
2. Rosson GD, Singh NK (2005) Devascularizing complications of free fibula harvest: peronea arteria magna. *J Reconstr Microsurg* 21:533–538