



## Clinical Image of the Month

### Persistent sciatic artery, a rare cause of femoropopliteal occlusion

#### *Arteria ciática persistente, una causa infrecuente de bloqueo femoropoplíteo*

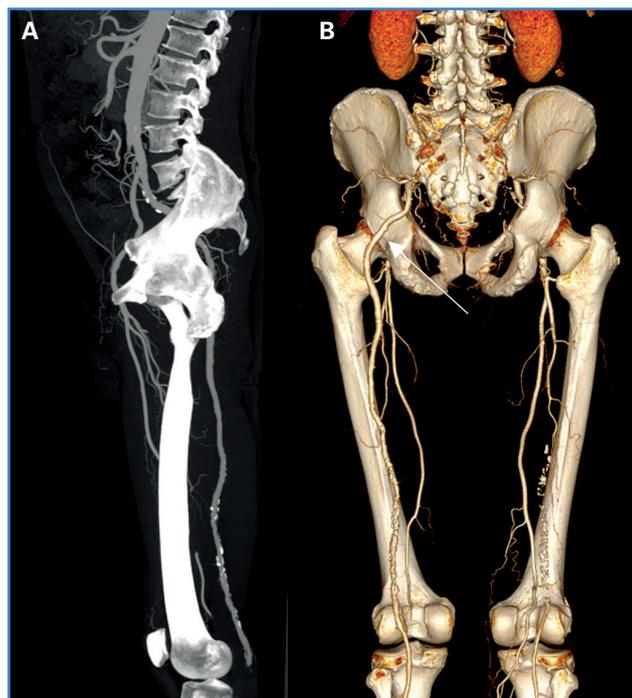
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#### CASE REPORT

This is the case of a 69-year-old man with no cardiovascular risk factors who presented with intermittent claudication of the right lower limb. Physical examination confirmed the absence of popliteal

and distal pulses in the affected limb. A decrease in both femoral pulses was noted as well. The Strandness test performed confirmed that the claudication was of vascular origin, and the CCTA requested revealed the presence of bilateral persistent sciatic artery, the right one being completely occluded (Fig. 1).



**Figure 1.** A. Sagittal section of the angio CT. B. 3D reconstruction viewed from posterior. Note the vascular structures passing through the greater sciatic foramen (arrow) and connecting with the popliteal artery, with the one on the right side occluded.

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Since the patient exhibits non-disabling claudication, conservative management was decided. Subsequent periodic follow-ups have confirmed a significant improvement in the patient's claudication distance.

## DISCUSSION

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Persistent sciatic artery (PSA) is a rare congenital anomaly due to its non-involution during fetal development, typically due to the lack of development of the superficial femoral artery. The estimated incidence rate of PSA is low, between 0.01 % and 0.05 %. PSA often presents unilaterally and remains asymptomatic.

Aneurysmal degeneration is the most well-known complication. It can present with compression of the sciatic nerve or limb ischemia due to aneurysm thrombosis. This entity should be suspected in the presence of a pulsatile gluteal mass, or in a patient with Cowie's sign, defined as the absence or

reduced femoral pulse with the remaining pulses being normal.

The therapeutic management of this anomaly should be individualized. Lifelong periodic monitoring with non-invasive methods is suggested for asymptomatic patients to reduce the risk of complications. There is no consensus on which the optimal management of symptomatic PSA really is. Both open surgical and endovascular strategies are described in the literature for patients at risk of limb loss.

This case highlights the importance of conducting a thorough vascular study in patients with claudication, especially those without a vasculopathy, or those exhibiting abnormalities on examination.

## RECOMMENDED REFERENCE

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1. Van Hooft IM, Zeebregts CJ, Van Sterkenburg SMM, de Vries WR, Reijnen MMPJ. The Persistent Sciatic Artery. *Eur J Vasc Endovasc Surg* 2009;37(5):585-91. DOI: 10.1016/j.ejvs.2009.01.014