

Teaching NeuroImages:

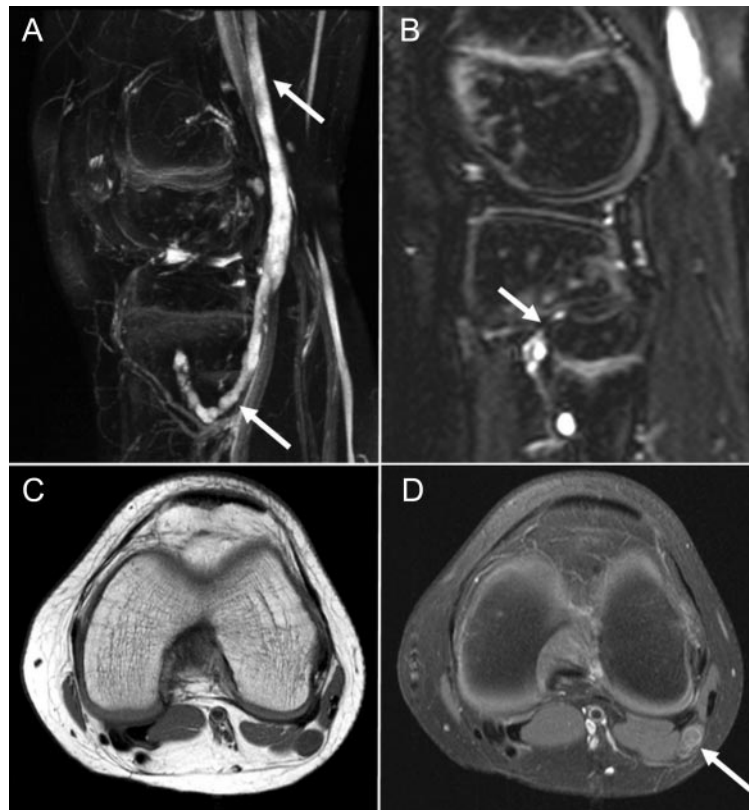
Peroneal intraneural ganglion cyst

A rare cause of drop foot in a child

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Figure Left peroneal magnetic resonance neurography



Oblique sagittal MIP T2-weighted neurographic image (A) shows the course of the peroneal nerve (arrows) that appears thickened and with increased T2 signal, from the tibio-peroneal joint up to sciatic bifurcation (about 15 cm). A magnified sagittal T2-weighted fat-suppressed thin section (B) depicts the involvement of the tibio-peroneal articular ramus of the peroneal nerve (arrow). Axial unenhanced (C) and contrast-enhanced fat-suppressed (D) T1-weighted images show thickening and heterogeneous contrast enhancement of the peroneal nerve (arrow in D).

An 11-year-old boy presented with a 3-month history of progressive left foot drop. Clinical findings were consistent with left peroneal mononeuropathy, but neurophysiologic studies failed to demonstrate signs of peroneal nerve entrapment. Magnetic resonance neurography revealed a peroneal intraneural ganglion cyst (PIG) (figure, A–D). The patient underwent surgical resection of the PIG, resulting in mild improvement of symptoms. PIG are thought to originate from the articular branch of the peroneal

nerve (figure, B).¹ Only 12 cases have been described in patients younger than 18 years.² Radiologic investigation should be considered in children with atypical peroneal palsy in order to detect uncommon causes that may be surgically treatable.

AUTHOR CONTRIBUTIONS

Dr. Luigetti: drafting/revising the manuscript for content, including medical writing for content; study concept or design; analysis or interpretation of data; acquisition of data; study supervision or coordination. Dr. Sabatelli: study

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concept or design; analysis or interpretation of data; acquisition of data. Dr. Montano: drafting/revising the manuscript for content, including medical writing for content; analysis or interpretation of data; acquisition of data; study supervision or coordination. Dr. Cianfoni: drafting/revising the manuscript for content, including medical writing for content; analysis or interpretation of data; acquisition of data; study supervision or coordination. Dr. Fernandez: analysis or interpretation of data; acquisition of data. Dr. Lo Monaco: study concept or design; analysis or interpretation of data; acquisition of data.

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