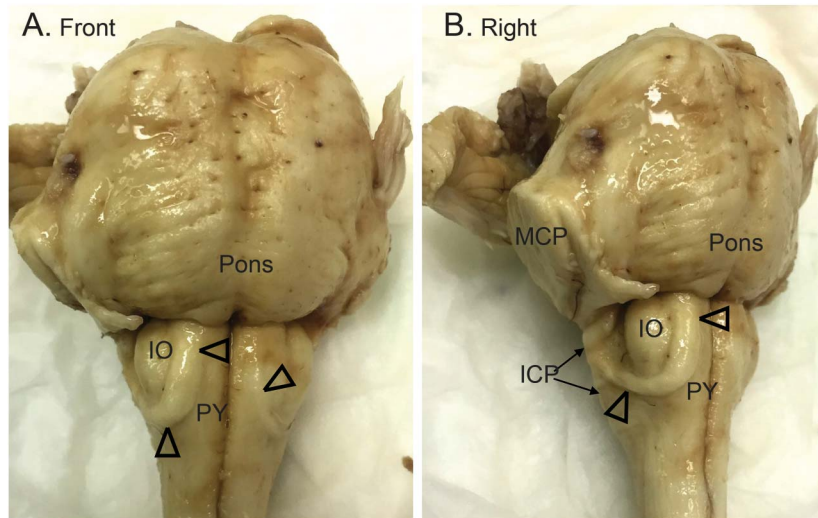


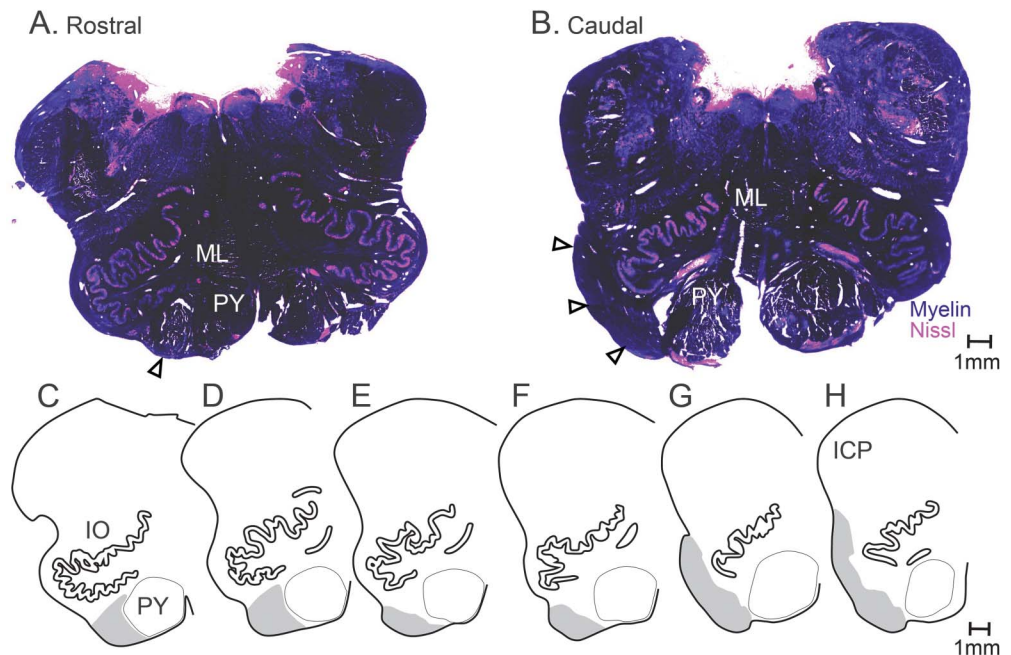
Identification of aberrant white matter bundles entering the inferior cerebellar peduncle

Figure 1 Gross appearance of aberrant white matter bundles



Bilateral, aberrant white matter bundles (arrowheads) are observed leaving the pyramidal tract (PY), circumscribing the inferior olive (IO), and entering the inferior cerebellar peduncle (ICP; middle cerebellar peduncle [MCP]). The aberrant bundles are markedly smaller on the left side of the brainstem.

Figure 2 Histologic appearance of aberrant white matter bundles in the medulla



Aberrant white matter bundles (arrowheads in A and B; gray contours in C-H) could be traced in sections from the medulla, where they separate from the pyramidal tracts (PY) in the rostral medulla (ML) (A), course external to the caudal inferior olive (IO) (B), and enter the inferior cerebellar peduncle (ICP).

During postmortem examination of a 34-year-old man with accidental death and no prior neurologic dysfunction, bilateral aberrant axon bundles were identified in the brainstem (figure 1). These bundles left the pyramidal tract in the medulla, passed caudally around the inferior olive, and entered the inferior cerebellar peduncle. In sections through the pons, these bundles projected towards pontine nuclei. In the medulla, these bundles were distinct from the pyramidal tract (figure 2). This bundle is termed fascicularis circumolivaris pyramidalis¹ and appears to be aberrant pontocerebellar axons.² This extremely rare variation might be mistaken for hypertrophic olivary degeneration or brainstem glioma.

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