Teaching NeuroImages: Unilateral focal segmental hyperhidrosis from spinal tumor progression

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A 10-year-old girl presented with excessive sweating overlying her right scapula (figure) and stable right leg weakness due to an underlying solid cystic pilocytic astrocytoma spanning T3–T12, debulked 5 months earlier, subsequently re-decompressed with syringosubarachnoid shunt placement secondary to intrasyrinx hemorrhage. MRI demonstrated mild tumor and syrinx progression at T5–T8, limited to the right side (figure, B–E). Focal segmental hyperhidrosis is rare, previously reported in Chiari and traumarelated syringomyelia. Here, unilateral hyperhidrosis was caused by ipsilateral tumor and syrinx progression. The pathophysiology may be from local tissue damage causing hyperactivity of preganglionic sympathetic neurons or disinhibition of inhibitory local interneurons.²

Author contributions

C.S. Hong: drafting/revising the manuscript, data acquisition, study concept or design, analysis or interpretation of data, accepts responsibility for conduct of research and final approval,

Figure Photograph and imaging

A C C E E

(A) Photograph after physical therapy demonstrates unilateral sweat staining, overlying the right scapula. (B) Sagittal postcontrast T1-weighted MRI shows tumor at T3 (arrow), affecting the (C) right side of the spinal cord. (D) Sagittal T2-weighted MRI illustrates large T2-4 syrinx centered at T3 (arrow) with (E) right-sided predominance.

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Study funding

No targeted funding reported.

Disclosure

The authors report no disclosures relevant to the manuscript. Go to Neurology.org/N for full disclosures.

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This information is current as of August 12, 2019

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