Teaching NeuroImages: Postoperative bifocal stroke of the pontine tegmentum
Why don’t you smile anymore?

A 7-year-old boy underwent resection of a posterior fossa medulloblastoma. Two days later, he developed facial diplegia, left abducens nerve palsy, and mild hypalgesia below the neck. MRI documented 2 dot-like ischemic foci in the pons (figure). We diagnosed the unusual bilateral occurrence of Gasperini syndrome, a lesion of the sixth and seventh cranial nerve nuclei and the lateral spinothalamic tract that produces ipsilateral cranial nerve palsies with contralateral hemisensory deficits.1 We hypothesized a mechanism of postoperative spasm of long circumferential branches of the basilar artery. This mechanism should be considered in cases of postoperative neurologic deficits with delayed onset.2

AUTHOR CONTRIBUTIONS
Paolo Frassanito: drafting/revising the manuscript, study concept or design, analysis or interpretation of data, accepts responsibility for conduct of research and final approval, acquisition of data. Luca Massimi: drafting/revising the manuscript, accepts responsibility for conduct of research and final approval. Gianpiero Tamburrini: drafting/revising the manuscript, accepts responsibility for conduct of research and final approval, study supervision. Concezio Di Rocco: analysis or interpretation of data, accepts responsibility for conduct of research and final approval. Massimo Caldarelli: drafting/revising the manuscript, accepts responsibility for conduct of research and final approval, study supervision.

(A) Preoperative T2-weighted axial MRI sequence shows a tumor of the fourth ventricle. (B, C) Postoperative T2-weighted axial and coronal MRI sequences demonstrate hyperintense lesions bilaterally in the pontine tegmentum (arrows). (D) Diffusion-weighted imaging documents 2 areas of restricted diffusion, suggestive of infarction (arrows).

From Pediatric Neurosurgery, Catholic University Medical School, Rome, Italy.

Go to Neurology.org for full disclosures. Funding information and disclosures deemed relevant by the authors, if any, are provided at the end of the article.
STUDY FUNDING
No targeted funding reported.

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

REFERENCES
Teaching NeuroImages: Postoperative bifocal stroke of the pontine tegmentum: Why don’t you smile anymore?
Paolo Frassanito, Luca Massimi, Gianpiero Tamburrini, et al.
Neurology 2014;82:e165-e166
DOI 10.1212/WNL.0000000000000406

This information is current as of May 12, 2014

Updated Information & Services
including high resolution figures, can be found at:
http://www.neurology.org/content/82/19/e165.full.html

Supplementary Material
Supplementary material can be found at:
http://www.neurology.org/content/suppl/2014/05/11/82.19.e165.DC1

References
This article cites 2 articles, 0 of which you can access for free at:
http://www.neurology.org/content/82/19/e165.full.html##ref-list-1

Subspecialty Collections
This article, along with others on similar topics, appears in the following collection(s):
Childhood stroke
http://www.neurology.org/cgi/collection/childhood_stroke
Clinical neurology examination
http://www.neurology.org/cgi/collection/clinical_neurology_examination
MRI
http://www.neurology.org/cgi/collection/mri
Pediatric stroke; see Cerebrovascular Disease/Childhood stroke
http://www.neurology.org/cgi/collection/pediatric_stroke_see_cerebrovascular_disease-childhood_stroke

Permissions & Licensing
Information about reproducing this article in parts (figures,tables) or in its entirety can be found online at:
http://www.neurology.org/misc/about.xhtml#permissions

Reprints
Information about ordering reprints can be found online:
http://www.neurology.org/misc/addir.xhtml#reprintsus