We report a 15-year-old boy with chromosome 19p13.3 microdeletion, intellectual disability, colobomas, and drug-resistant epilepsy. He had near daily seizures characterized by eyelid fluttering, behavioral arrest, and unawareness with occasional progression to generalized tonic activity. Brain MRI showed diffuse white matter hyperintensities with a predilection for subcortical U-fibers. Video-EEG monitoring showed multifocal interictal discharges but a consistent ictal onset grossly in the left posterior temporal and occipital regions but with up to 10 seconds of electrophysical delay. Brain PET was unremarkable, but ictal SPECT (figures 1 and 2) revealed a discrete functional lesion in the left ventral occipital cortex. Here, ictal SPECT delineated the 3D...
borders of the seizure onset zone in the deep occipital cortex. This information can be used to further refine the epileptogenic zone (EZ) in a targeted stereo-EEG investigation to optimize surgical outcome\(^1\) and decrease SUDEP risk.\(^2\)

Ictal SPECT may assist lateralization, and even localization, of the EZ in patients with occipital lobe epilepsy\(^3,4\); MRI coregistration and early injection may further increase its yield.

**Study Funding**
No targeted funding reported.

**Disclosure**
F. Nascimento is a member of the *Neurology*\(^\circledR\) Resident & Fellow Section Editorial Team. R. Cochran, D. Chow, J. Scott, and C. Chu report no disclosures relevant to the manuscript. Go to Neurology.org/N for full disclosures.

![Figure 2 Dual Phase Perfusion SPECT With MRI Coregistration](image)

(A, B) A focus of hyperperfusion (red arrows) within the left ventral occipital cortex using fused subtraction SPECT-SPACE fluid-attenuated inversion recovery MRI. (A) Adjusted to show differences with Z scores >2.5; (B) shows all differences. (C, D) Interictal and ictal phases of 99mTc-ECD perfusion SPECT, respectively.

**Appendix**

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Contribution</th>
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</thead>
<tbody>
<tr>
<td>Fábio A. Nascimento, MD</td>
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</table>

**References**
Teaching NeuroImage: Increasing SPECTations for Ictal SPECT in Epilepsy Surgical Evaluation
Fábio A. Nascimento, Rory L. Cochran, David Z. Chow, et al.
Neurology 2021;97:e647-e648 Published Online before print April 26, 2021
DOI 10.1212/WNL.0000000000012097
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