Measurement of retinal ganglion cell layer thickness by optical coherence tomography provides an objective and reliable evaluation of anterior visual pathway lesions to complement visual field testing in the management of optic chiasm compression from pituitary tumors.\(^1,2\) We demonstrated 3 differing patterns of ganglion cell layer thinning—junctional (figure 1, A and D), binasal (figure 1, B and E), and homonymous (figure 1, C and F)—and illustrated how these patterns correspond to the location of chiasmal compression by pituitary adenomas, anteriorly (figure 2A), centrally (figure 2B), or posteriorly (figure 2C). Consideration of the pattern of ganglion cell layer thinning in conjunction with visual field testing is useful for predicting the location of anterior visual pathway lesions.
Study Funding
The authors report no targeted funding.

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

Appendix Authors

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gregg D. Miller, BA</td>
<td>Tufts University School of Medicine, Boston</td>
<td>Prepared the manuscript, figures, and PowerPoint</td>
</tr>
<tr>
<td>Laurel N. Vuong, MD</td>
<td>New England Eye Center, Boston</td>
<td>Conceptualized and revised the manuscript, treating physician</td>
</tr>
<tr>
<td>Thomas R. Hedges III, MD</td>
<td>New England Eye Center, Boston</td>
<td>Conceptualized and revised the manuscript, treating physician</td>
</tr>
</tbody>
</table>

References
Teaching NeuroImage: Ganglion Cell Patterns Localize Anterior Visual Pathway Lesions
Gregg D. Miller, Laurel N. Vuong and Thomas R. Hedges III
Neurology 2021;97:e1637-e1638 Published Online before print May 13, 2021
DOI 10.1212/WNL.0000000000012200

This information is current as of May 13, 2021

Updated Information & Services
including high resolution figures, can be found at:
http://n.neurology.org/content/97/16/e1637.full

References
This article cites 2 articles, 0 of which you can access for free at:
http://n.neurology.org/content/97/16/e1637.full#ref-list-1

Subspecialty Collections
This article, along with others on similar topics, appears in the following collection(s):
MRI
http://n.neurology.org/cgi/collection/mri
Optic nerve
http://n.neurology.org/cgi/collection/optic_nerve
Visual fields
http://n.neurology.org/cgi/collection/visual_fields
Visual loss
http://n.neurology.org/cgi/collection/visual_loss

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

Reprints
Information about ordering reprints can be found online:
http://n.neurology.org/subscribers/advertise

Neurology® is the official journal of the American Academy of Neurology. Published continuously since 1951, it is now a weekly with 48 issues per year. Copyright © 2021 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.