

Teaching NeuroImage: Horizontal Diplopia Due to Extraocular Muscle Metastasis

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Neurology® 2022;99:669-670. doi:10.1212/WNL.000000000000201061

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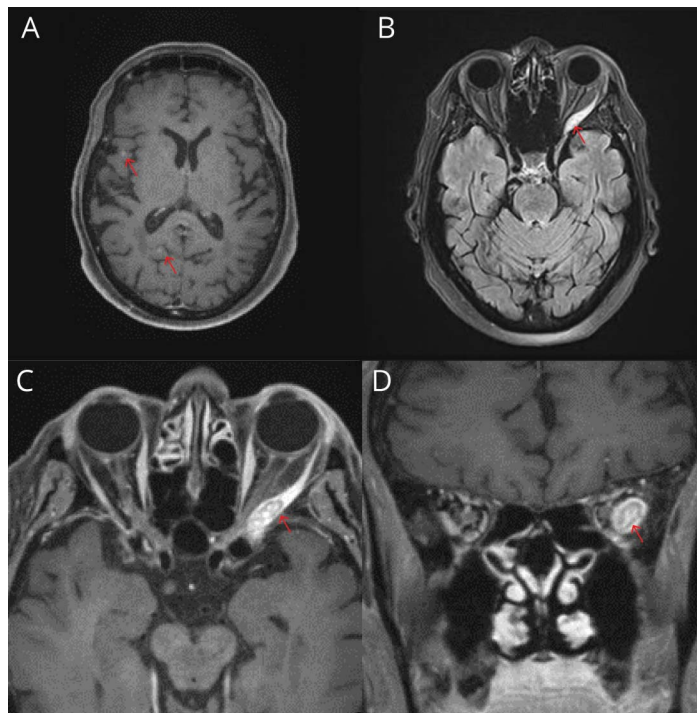
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Figure MRI of the Brain and Orbits



(A) Postcontrast T1-weighted MRI axial demonstrating subcentimeter right frontal and right occipital enhancing lesions consistent with metastasis (arrows). (B) T2-weighted fluid-attenuated inversion recovery MRI demonstrating left lateral rectus lesion (arrow). (C) Postcontrast T1-weighted MRI of the orbits demonstrating enhancing lesion involving left lateral rectus (arrow) in axial view. (D) Postcontrast T1-weighted MRI of the orbits demonstrating enhancing lesion involving left lateral rectus (arrow) in coronal view.

An 80-year-old woman with previously resected melanoma of the right thigh presented with acute binocular diplopia. Neurologic examination demonstrated inability to abduct the left eye with normal right eye adduction. Examination was otherwise normal. This presentation of left lateral rectus palsy can occur due to ischemic, inflammatory, autoimmune, compressive, or neoplastic etiologies. MRI orbits identified an enhancing left lateral rectus lesion consistent with extraocular muscle metastasis. MRI of the brain revealed multiple subcentimeter-enhancing lesions (Figure).¹ Subsequent lymph node biopsy confirmed metastatic melanoma. Despite radiotherapy and BRAF-targeted systemic therapy, rapid progression occurred, and the patient died 5 months after initial evaluation.²

Study Funding

No targeted funding reported.

From the Department of Neurology, Mayo Clinic, Rochester, MN.

Go to Neurology.org/N for full disclosures. Funding information and disclosures deemed relevant by the authors, if any, are provided at the end of the article.

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Disclosure

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

Publication History

Received by *Neurology* January 10, 2022. Accepted in final form June 17, 2022. Submitted and externally peer reviewed. The handling editor was Roy Strowd III, MD, MEd, MS.

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Name	Location	Contribution
Merve Atik, MD	Department of Neurology, Mayo Clinic, Rochester, MN	Drafting/revision of the manuscript for content, including medical writing for content; major role in the acquisition of data; study concept or design; analysis or interpretation of data

Appendix (continued)

Name	Location	Contribution
David Nathan Abarbanel, MD	Department of Neurology, Mayo Clinic, Rochester, MN	Drafting/revision of the manuscript for content, including medical writing for content; major role in the acquisition of data; study concept or design; analysis or interpretation of data
Ugur Sener, MD	Department of Neurology, Mayo Clinic, Rochester, MN	Drafting/revision of the manuscript for content, including medical writing for content; major role in the acquisition of data; study concept or design; analysis or interpretation of data

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Neurology 2022;99;669-670 Published Online before print August 19, 2022

DOI 10.1212/WNL.0000000000201061

This information is current as of August 19, 2022

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