

Homonymous Hemianopsia: Initial Workup and Etiologies

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LEARNING OBJECTIVES

1. Discuss workup of homonymous hemianopsia
2. Discuss the potential causes of homonymous hemianopsia
3. Discuss the impact of this visual deficit on quality of life and how to build a comprehensive care team

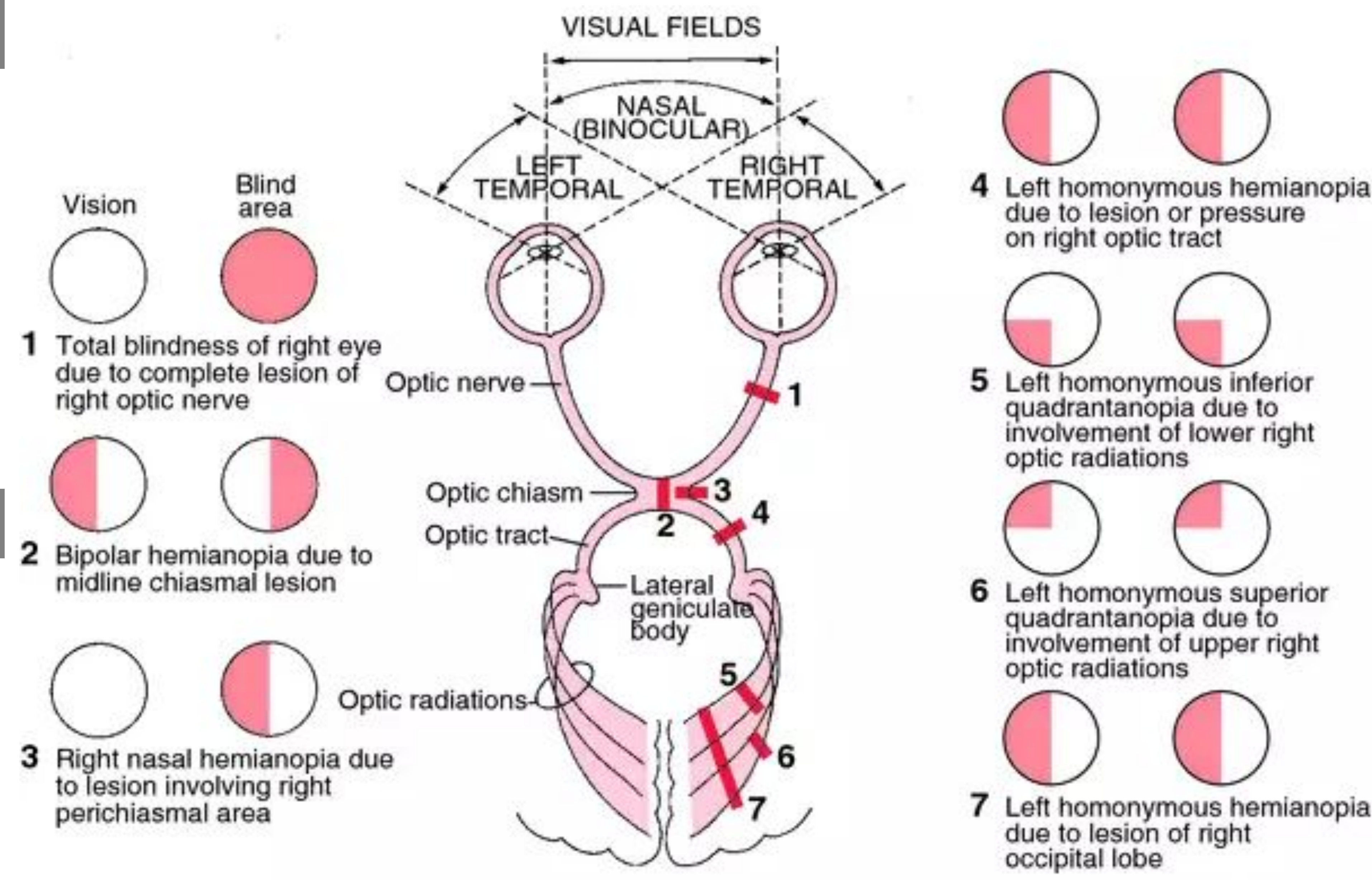
CASE PRESENTATION

- 72 yo female presents with chief complaint of dizziness over the past 3 days; she also has been noticing changes to her field of vision over the past 3 months, needing to turn her head to see shelves at the grocery store

INITIAL VITALS/PHYSICAL EXAM/LABS

- Vitals were stable upon initial presentation; physical exam was unremarkable except for left homonymous hemianopsia on neurologic examination
- CBC, CMP were within normal limits

Laboratory Data/ Vitals	
Temp: 98.4 F	O2 98% RA, RR 18
HR: 98 bpm	BP: 151/98 mm Hg
WBC 9.1	Na 137
Hb 14.3	K 5.1
AST 33	BUN 9
ALT 23	Creatinine 0.65
Troponin <0.01	



IMAGING/Hospital Course

- Noncontrast CT head in the ED revealed an area of low attenuation in the parietal lobe, suggestive of recent infarct or mass
- The patient was admitted for further workup, and was in the meantime started on aspirin, high intensity statin
- MRI brain revealed multiple enhancing masses in the parietal lobe, suggesting a malignant or infectious process
- CT Chest Abdomen pelvis was ordered to evaluate for a systemic malignancy, which was unremarkable
- She was transferred to JSUMC for brain biopsy, which ultimately revealed glioblastoma multiforme
- The patient ultimately underwent chemotherapy and radiation and now has a comprehensive care team including PT, OT, psychiatry

Homonymous Hemianopsia - Etiologies and Workup

- Homonymous hemianopsia is characterized loss of each half of each visual field
- Differential diagnosis is broad, stroke accounts for nearly 70% of cases
- Other causes include brain tumors, infections, autoimmune conditions
- Initial workup should include a full neurologic exam, and a visual acuity test if possible
- If symptoms are acute, stroke workup is warranted
- Neuroimaging is key- MRI or CT is preferred
- Treatment should be focused on the underlying etiology

CONCLUSIONS

- Homonymous hemianopsia warrants an extensive workup
- Vision loss is usually permanent, with only 17% of patients regaining vision
- Hemianopsia can significantly impact quality of life, affecting patient's ability to perform daily tasks such as driving, reading, and shopping
- Due to these ramifications, along with the severity of most of the underlying causes, a comprehensive care team is important
- PT/OT to improve the patient's functional status is important
- Due to the psychological impact of this visual defect, as well as the gravity of these diagnoses, psychiatry is a key member of the care team