

Ocular therapy with compensatory strategy, education and training is critical for adapting to Cortical Blindness

Cortical Blindness as a Result of Bilateral Posterior Cerebral Artery Stenosis, Atrial Flutter, and Hypertensive Urgency.

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CASE DIAGNOSIS

Cortical blindness secondary to bilateral posterior cerebral artery stenosis, atrial flutter, and hypertensive urgency.

CASE DESCRIPTION

- A 54-year-old man with a history of uncontrolled hypertension and atrial flutter was brought to the ED after a witnessed fall off a tractor trailer.
- He presented with seizure-like activity, hypertensive urgency and altered mental status.
- MRI revealed large infarcts in bilateral posterior cerebral hemispheres, thalami, and hippocampi. Angiography revealed moderate to severe P2 segment occlusions bilaterally. Repeat MRI showed hemorrhagic transformation of the parietal, occipital, and thalamic infarcts (see Image 1 & 2).
- Upon presentation to acute rehab, he had significant bilateral weakness, blindness, hemi-neglect, as well as impairments with proprioception and motor planning.
- Despite his severe cognitive and communication impairments, and limited insight, he made significant improvements with bed mobility and transfers.



DISCUSSION

- Despite the lack of pathology to the ocular structures or optic nerve, cortical blindness is a consequence of injury to the visual (occipital) cortex of the brain, often resulting in permanent visual impairments.
- Although our patient was not able to regain his vision, he made immense functional gains which vastly improve his quality of life.
- Following discharge, he continues to benefit from interdisciplinary services as an outpatient.

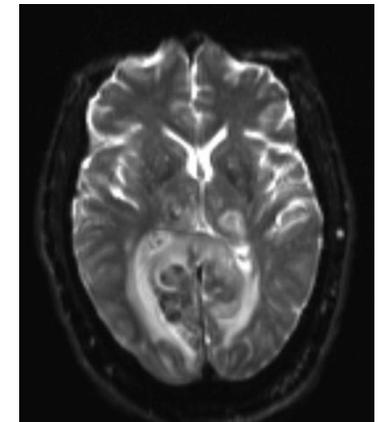
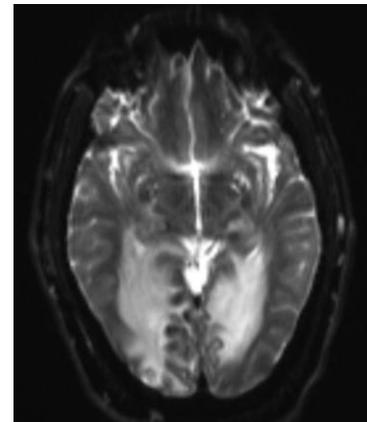


Image 1 and 2. Acute infarcts bilateral occipital lobes, posterior temporal lobes and right posterior parietal lobe as well as the mesial thalami. Small acute infarct of the right frontal lobe and left cerebellum. Areas of hemorrhagic transformation and local mass effect without midline shift.

KEY POINTS

- Bilateral cortical blindness often results in permanent visual impairment, traumatically impact ones quality of life.
- Patients may benefit from a specialized, multi-disciplinary approach by incorporating both ocular therapy with compensatory strategy, education and training while inpatient.
- Outpatient interdisciplinary coordination and support are a mainstay for continued success and progress.