

# Occipital Strokes and Bilateral Oculomotor Palsy Due to Bilateral Giant Cell Arteritis

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**Introduction:** Giant cell arteritis (GCA) is a vasculitis affecting large and medium arteries, it commonly involves temporal arteries and can lead to severe complications such as vision loss and stroke.

Oculomotor palsy is a very rare but serious manifestation. This case report discusses a 79-year-old female with GCA, occipital strokes, and bilateral oculomotor palsy, emphasizing the need for early recognition and treatment.

**Case Presentation:** A 79-year-old woman with a history of migraine presented with a two-day history of worsening frontal headache, sinus pain, blurry and double vision, fatigue, dizziness, chills, night sweats, nausea, vomiting, dry cough, and decreased oral intake. Her headache was different from her usual migraines and unresponsive to ibuprofen. Physical exam revealed double vision and diffuse facial tenderness. Labs showed elevated WBC, creatinine, procalcitonin, CRP, ESR (67 mm/h), and lactate. Initial imaging and tests showed left occipital strokes and enterocolitis. Initial ophthalmology exam showed vision loss due to occipital stroke and oculomotor palsy. Despite starting pulse-dose steroids after CSF ruled out meningitis, her vision deteriorated, resulting in total vision loss in the right eye. Repeat ophthalmology exam showed optic disc edema and hemorrhage suggestive of GCA. Bilateral temporal artery biopsy was positive for GCA. She was discharged on a 6-week prednisone taper and Tocilizumab. A follow-up ophthalmology exam showed similar right eye findings, however left eye oculomotor palsy resolved.

**Discussion:** GCA requires prompt diagnosis and treatment to prevent severe complications. This case illustrates the diagnostic challenges, especially with overlapping symptoms like sepsis-like presentations, and blurry/double vision in the setting of occipital strokes and oculomotor palsy. The progression to

complete vision loss despite treatment highlights the aggressive nature of GCA. Multidisciplinary management involving neurologists, ophthalmologists, and rheumatologists is crucial. This case aims to increase awareness of GCA's atypical presentation, severe manifestations, and the need for timely intervention.

**Keywords:** Giant Cell Arteritis, Stroke, Oculomotor Palsy

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