## Isolated oculomotor nerve palsy secondary to internal carotid artery aneurysm: timely intervention for a reversible visual outcome

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## ABSTRACT

Intracranial aneurysms cause 34–56% of isolated oculomotor nerve palsies, which is not uncommon. We describe the importance of prompt recognition and management to prevent life and vision-threatening complications. A 57-year-old gentleman with underlying diabetes, hypertension and dyslipidaemia, presented with a three-day history of left eye (LE) ptosis and diplopia. There was associated headache a month ago. Right eye (RE) visual acuity (VA) on presentation was 6/7.5, while LE VA was 6/10. Examination showed left complete ptosis with a "down-and-out" displacement of the eye. LE was only able to abduct. There was anisocoria whereby the pupil size of RE was 2 mm and LE was 7 mm. Relative afferent pupillary defect was absent. The assessments of anterior and posterior segments were unremarkable. Initial contrasted computed tomography (CT) scan of brain and orbit was normal. However, with high index of suspicion of intracranial aneurysm, CT angiography (CTA) was done and showed saccular aneurysm from the terminal segment of left internal carotid artery with mass effect to the left temporal lobe. Clipping of aneurysm was performed by neurosurgical team on day-five of symptoms. Post-operatively, his left VA improved to 6/7.5 with reversibility in left pupil size and improved LE ptosis. Although the limitation of LE extraocular movement remained unchanged, he experienced improvement in diplopia. High index of clinical suspicion is utmost important in managing pupil-involving oculomotor nerve palsy. CTA is a better radiological modality in detecting intracranial aneurysm and allows timely intervention which may reverse the initial visual-related complications.