

Acquired Lateral Rectus Palsy: A Case Report

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Citation

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Abstract

Acquired palsy of the abducens (VI) nerve has a broad differential, which includes infectious, inflammatory, and space-occupying etiologies. However, the largest percentage of cases are secondary to chronic vasculopathy (such as diabetes), and true idiopathic causes.

CASE

An 86 year old man with a history of hypertension and diabetes presented to the ED with complaints of blurred vision for one week. The vision blurriness increased with left lateral gaze, and was not preceded by trauma or fever. There were associated headaches, none sudden-onset, with no vomiting or neck stiffness. The patient had never had blurred vision of this type before, but reported right-sided sensory loss after a head injury some 70 years prior—this sensory loss remained stable.

DISCUSSION

Acquired paresis of the lateral rectus presents with horizontal diplopia, and has a broad differential, one which includes many serious and potentially life-threatening pathologies (1). While pathology of the lateral rectus muscle itself is possible, a palsy of the abducens nerve (CN VI) is far more prevalent. While the majority of cases are not immediately life-threatening (greater than 40% of cases, by several meta-analyses (2,3)), these serious etiologies must be ruled out before disposition from the Emergency Department (ED).

Central ischemic syndromes can cause palsies of VI, however the ischemia is rarely confined to the VI nucleus, and therefore is predominantly associated with other focal neurological deficits (4). The etiologies of isolated VI palsy

which necessitate urgent/emergent diagnosis and treatment include mass lesions (neoplasms should be under particular suspicion with pediatric presentations of VI palsy), vascular inflammatory conditions such as temporal arteritis, aneurysms (both pre- and post-rupture), cavernous sinus syndromes (such as cavernous sinus thrombosis), multiple sclerosis, and Lyme disease (1). Because the above etiologies must be ruled out in an urgent manner, MR imaging (with or without MR angiography) is required in nearly all cases of new VI palsy before discharge from the hospital. After workup, the less emergent diagnoses can be considered, the most common of which is a vasculopathy secondary to diabetes, which was our patient's final diagnosis. Unfortunately, a significant percentage of patients, even after workup, retain a diagnosis of 'idiopathic' palsy of VI (5).

References

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