

Central Retinal Vein Occlusion with Cilioretinal Artery Occlusion: a Case Report

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INTRODUCTION

Central Retinal Vein Occlusion (CRVO) with Cilioretinal Artery Occlusion (CLRAO) is a rare and intricate vascular disorder. Central Retinal Vein Occlusion occurs when there is a blockage in the main vein that drains blood from the retina, leading to impaired blood flow and subsequent retinal damage. CLRAO may occur after a CRVO, since the cilioretinal artery experiences reduced perfusion due to a hemodynamic block. The low perfusion pressure originating from the choroid, which supplies the cilioretinal artery, fails to counterbalance the heightened venous pressure resulting from CRVO.

CASE REPORT

Patient AWM, a 49-year-old female, presented to the Emergency Department at CBV Hospital - Brasília reporting of a gray spot in her vision upon waking up in her right eye for the past 1 day. She reported experiencing transient amaurosis days prior. She denies any known medical conditions, medication use, or prior surgeries. She mentions being a former smoker.

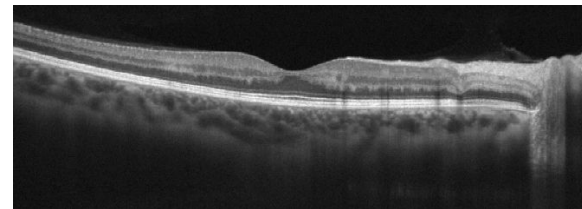
On ophthalmological examination, she had visual acuity with best correction of 20/25 in the right eye with central scotoma and 20/20 in the left eye. Upon biomicroscopy in both eyes, no alterations were noted. The funduscopy revealed in the right eye increased vascular tortuosity, mild venous congestion, venous narrowing, increased venous dorsal reflex, presence of paleness in the superior parafoveal region, intraretinal microhemorrhages, and thickening in the posterior pole and mid-periphery in all four quadrants. Funduscopy of the left eye showed no abnormalities.

The patient was referred for systemic investigation of neurovascular conditions and returned with no findings of systemic diseases.

She underwent follow-up with OCT examination, visual field, and fluorescein angiography. The patient's visual prognosis was favorable, with improvement in the central scotoma after 3 months.

DISCUSSION

Prompt diagnosis and management are crucial in preserving vision and preventing further complications in Central Retinal Vein Occlusion (CRVO) with Cilioretinal Artery Occlusion (CLRAO). Treatment strategies may include addressing underlying systemic conditions contributing to vascular compromise. However, the prognosis can vary widely among individuals, with some experiencing partial recovery of vision while others may face irreversible vision loss. Understanding the pathophysiology and risk factors associated with this condition is essential for clinicians in guiding patient management and optimizing visual outcomes.



CONCLUSION

CRVO with cilioretinal artery occlusion represents a challenging clinical entity that necessitates a multidisciplinary approach involving ophthalmologists, internists, and other specialists. Through continued research and clinical advancements, clinicians aim to improve diagnostic accuracy, refine treatment strategies, and ultimately enhance the quality of life for individuals affected by this complex vascular disorder.

REFERENCES

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