Middle-aged male with an acute vision disturbance and nephritic syndrome: A Case Report

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Introduction:
Purtscher-like retinopathy is a rare retinal vasculopathy characterized by sudden vision loss and is associated with systemic diseases, including renal failure. We present a rare case of nephritic syndrome and neuroretinitis in a 46-year-old male with chronic hypertension, dyslipidemia, cryoglobulinemia, and multiple viral infections. These conditions interacted complexly, underscoring the need for comprehensive diagnostics.

Case Presentation:
The patient presented with vision deterioration, following episodes of untreated hypertension, with no prior comorbidities. An ophthalmologic exam revealed bilateral optic disc swelling and macular exudation. Laboratory tests indicated anemia, impaired kidney function (GFR 19 ml/min/1.73m²), dyslipidemia, increased lipase, lactate dehydrogenase, hypoalbuminemia. Urine analysis showed leukocyturia, microhematuria, proteinuria. Serology was positive for CMV, HSV, EBV. Autoimmune markers were negative, however, cryoglobulinemia, normal complement C4, borderline C3c levels, highly positive kappa and lambda-free light chains (normal ratio) were found. Brain MRI indicated left optic neuritis. Extracranial cerebral ultrasound demonstrated low-grade stenosis in the right MCA, suggestive of atherosclerotic arteriopathy. A kidney biopsy revealed focal membranoproliferative and sclerosing glomerulonephritis with isolated immune complexes/cryoglobulins, focal arterial endothelial proliferation as a possible component of thrombotic microangiopathy, cholesterol crystals in the tubules and foamy cells in the stroma. A complex systemic illness, including atheroembolic kidney disease, pancreatic dysfunction, cryoglobulinemia, viral infections caused Purtscher-like retinopathy. The treatment includes management of hypertension, dyslipidemia, renal dysfunction, steroid pulse therapy, therapeutic apheresis, and close monitoring by a multidisciplinary team.

Conclusion:
This case highlights the rare but significant occurrence of neuroretinitis and nephritic syndrome, caused by the complex interplay of several factors.