## Abstract

Antiphospholipid syndrome (APLS) is an autoimmune multisystem condition characterized by prothrombotic effects, leading to venous, arterial, and small vessel thrombosis, as well as specific pregnancy complications in the presence of antiphospholipid antibodies (aPL). Ocular manifestations of APLS are diverse, but the association with Nonarteritic Anterior Ischemic Optic Neuropathy (NAION) is rare. Here, we present a case of primary antiphospholipid syndrome presenting as NAION. A 55-year-old female with a history of unprovoked deep vein thrombosis in the left lower limb and defaulted follow-up presented with a sudden, painless loss of vision in her left eye persisting for six months. The ophthalmic examination revealed left-sided altitudinal vision loss in the upper quadrant, a relative afferent pupillary defect, and optic atrophy. Basic investigations were within normal limits, except for an elevated erythrocyte sedimentation rate (ESR) and positive Antinuclear antibody test. Repeated tests at 12-week intervals became positive for lupus anticoagulants, anti-beta2 Glycoprotein-1 antibody, and anti-cardiolipin antibody, establishing the diagnosis of primary antiphospholipid syndrome. Other autoantibodies, including dsDNA, were negative, and her complement levels showed low C3 and normal C4 levels. Visual evoked potential testing revealed partial dysfunction of the left anterior optic pathway, while MRI brain with MRA results was normal. Anticoagulation therapy was initiated with warfarin, leading to an improvement in her vision. This case highlights the importance of considering APLS as a potential etiology in patients presenting with NAION, especially whenthe cause is uncertain. Prompt recognition and diagnosis of APLS are crucial forinstituting appropriate treatment strategies to prevent further thrombotic events and potentially improve visual outcomes.