Conclusion: The study demonstrated that elevated levels of PLT, MPV and PDW were significantly associated with the development of DR. However, PDW appears to be a more likely predictor of DR in T2DM. We hold the view that the utility of these platelet indices as hemorheological markers of DR makes potential sense for early diagnosis and monitoring of DR.

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A case of central retinal vein occlusion associated with retrobulbar optic neuritis

Okudo, A.C.;[1,2] Babalola, O.E.[1,3] and Osamwonyi, O.O. [4,5]

[1]*Rachel Eye Center, Abuja, Nigeria*

[2]*Department of Ophthalmology, Nile University Teaching Hospital, Abuja, Nigeria*

[3]*Department of Surgery, Bingham University, New Karu/ Jos, Nigeria*

[4]*Department of Internal Medicine, Maitama District Hospital, Abuja, Nigeria*

[5]*Department of Internal Medicine, Nile University Teaching Hospital, Abuja, Nigeria*

Corresponding author: *Okudo, A.C.* ***E-mail:*** *adaoraokudo@gmail.com*

Background: Central retinal vein occlusion (CRVO) secondary to retrobulbar optic neuritis is a rare manifestation, and we did not find a reported case from Nigeria in the literature. There are very few reported cases of both pathologies co-existing in the same patient.[1-3]

Clinical Presentation: A 58-year-old gentleman, a known glaucoma patient, presented in our clinic with a one-hour history of painless, sudden loss of vision in the left eye. One month prior to the loss of vision, his eye felt heavy, but there was no redness, no pain on ocular movement or reduction in vision. On presentation to the clinic, we examined a middle-aged, healthy-looking man; he had a blood pressure of 130/70 mmHg, and all other aspects of his systemic examination, including the neurological examination, were normal, apart from the ocular examination. Visual acuity was 6/6 in the right eye and counting fingers at 3m (3MCF) in the left eye; intraocular pressures were 20 and 22 mmHg, respectively. His right ocular examination findings were normal. On the left, there was a relative afferent pupillary defect (RAPD), and posterior segment examination revealed a pale disc and cup disc ratio of 0.75, with distinct margins but dilated tortuous venules in all quadrants with mild retinal haemorrhages (Figure 1). Color desaturation was 100:30 and light appreciation was 100:20 in the right and left eyes, respectively. Fundus fluorescein angiography showed a delay in venule filling in all quadrants, worse inferotemporally. There was no area of capillary dropout and no feature suggestive of macula oedema (Figure 2); however, the late images showed hyperfluorescence (Figure 3) in the disc, suggesting an inflammatory process, i.e. retrobulbar neuritis, in the left eye. The optical coherence tomography showed no

significant macula oedema (Figure 4). Brain magnetic resonance imaging (MRI) showed nonspecific white matter changes; the MRI spine did not show any significant white matter changes. A diagnosis of left mild central retinal vein occlusion associated with retrobulbar neuritis secondary to multiple sclerosis (Clinical Isolated Syndrome) was made. He was placed on intravenous methylprednisolone 1g daily for 3 days and continued on 60 mg prednisolone daily, which was subsequently tapered off. His vision on the first day after commencing steroids improved to 6/12, and at 2 weeks, his vision had improved to 6/6, although he still had significant visual field changes (Figures 5 and 6). Over the last 4 months of follow-up, the left visual acuity remained 6/6, but he still had significant visual field changes (Figure 7). The patient consented to this case report, and ethical approval was obtained from the research ethics committee of Asokoro District Hospital, Abuja.

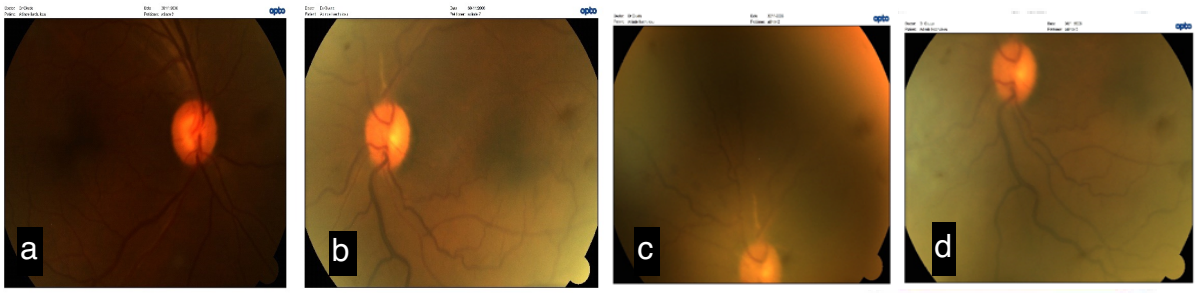

Figure 1a: *Fundus pictures of the right eye,* ***Figure 1b-1d:*** *Fundus pictures of the left eye showing the dilated tortuous vessels and mild retinal dot and blot haemorrhages.*

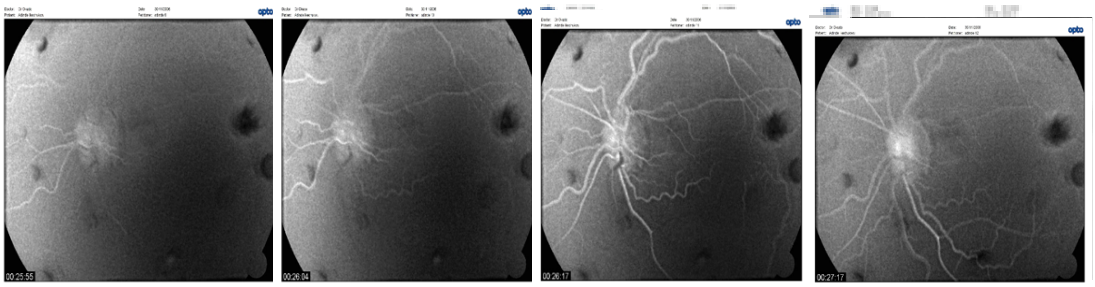

Figure 2: *Delayed fluorescein venous filling more marked intertemporally, mild venous tortuosity, no macula oedema or regions of capillary dropout.*

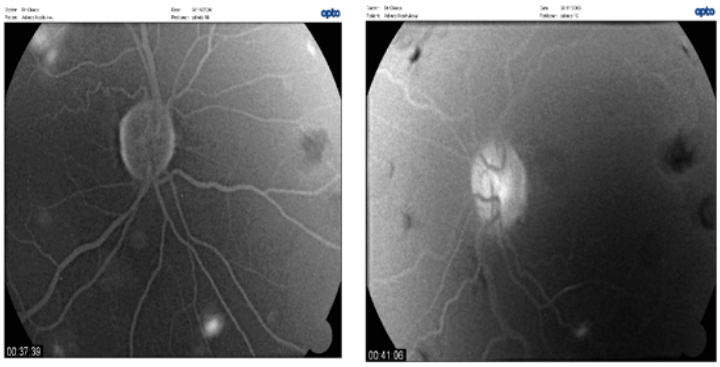

Figure 3: *Late stages of FFA showing hyperfluorescence around the optic nerve head of the left eye as compared to the right.*

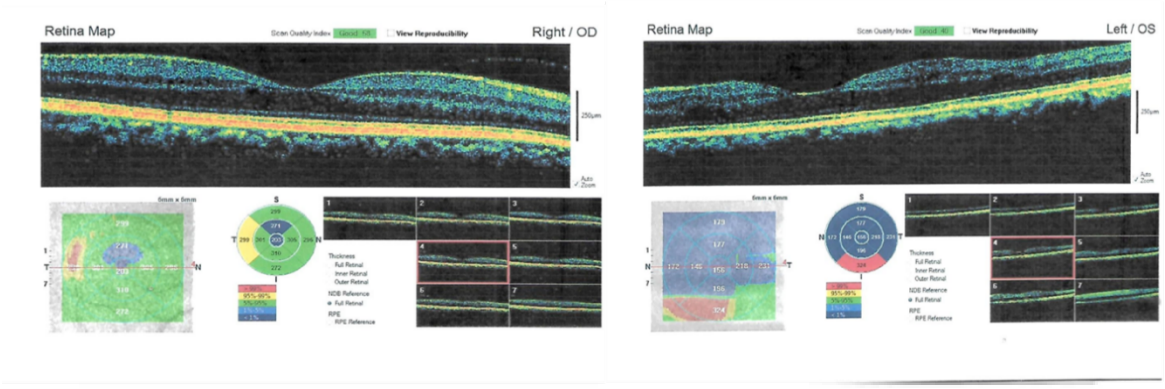

Figure 4: *Optical coherence tomography scans of both eyes. Left eye shows no macular oedema.*

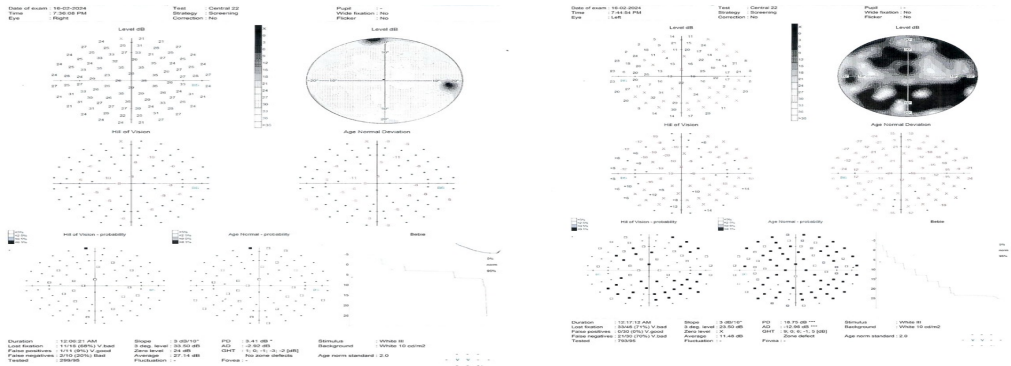

Figure 5: *Central visual field done 7 days after he presented showed barring of the blind spot, inferior altitudinal and superior paracentral, and focal defects in both superior quadrants.*

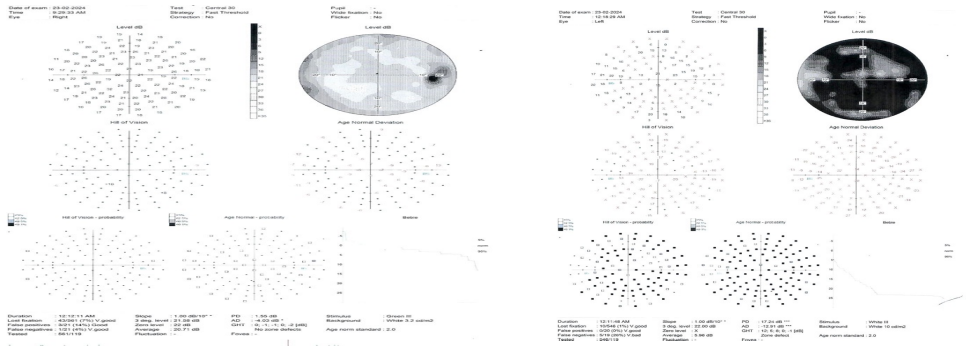

Figure 6: *Central visual field done 14 days after he presented showed barring of the blind spot, inferior altitudinal and superior paracentral, and field defects in both superior quadrants.*

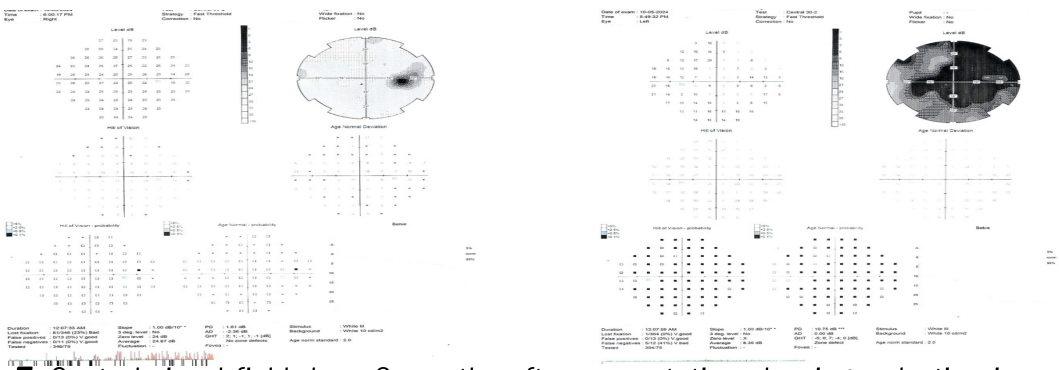

Figure 7: *Central visual field done 3 months after presentation showing reduction in scotoma in the inferior and superior fields.*

Discussion: Although he had features suggestive of a central retinal vein occlusion (CRVO), these could not explain the visual acuity of 3MCF and relative afferent pupillary defect, as the features of CRVO were mild. Retrobulbar neuritis was the main cause of reduced vision because of the visual acuity, RAPD, markedly reduced light appreciation and color desaturation, leakages around the optic nerve head seen in the late stages of FFA and the great improvement on commencing intravenous methylprednisolone.

Conclusion: A high index of suspicion is required to rule out retrobulbar neuritis when it co-exists with a retinal vein occlusion that cannot account for the clinical features seen.

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Hemiretinal cone-rod dystrophy in two male siblings: an unusual presentation

Babalola, Yewande O.;[1,2] Panda, Krushna G.;[1] Mukerjhee, Sujoy[1] and Padhi, Tapas R.[1]

[1]LV Prasad Eye Institute, Mithu Tulsi Chanrai campus, Bhubaneshwar, India

[2]Department of Ophthalmology, College of Medicine, University of Ibadan/ University College Hospital, Ibadan, Nigeria

Corresponding author: *Babalola, Y.O.*

E-mail: *yewandeb@gmail.com*

Introduction: Cone-rod dystrophies are inherited retinal disorders occurring in the first three decades of life and rarely, the fifth decade.[1,2] The prevalence is 1 in 40,000. The ABCA4 gene is the most prominent causal gene known.[3] Symptoms and signs include decreased vision, central scotomas, colour vision loss, photophobia, bone-spicule pigmentation, macular and retinal atrophy.[2-5] Typical findings include bone-spicule pigmentation, macular and retinal atrophy.[5] On multimodal imaging, characteristic electroretinography and visual field abnormalities are seen. [2,3] Hemiretinal variants of rod-cone dystrophies are relatively rare.[6]

Methods: Case reports of two male siblings with hemiretinal cone-rod dystrophy by multimodal imaging. Informed consent was obtained from the patients for this report.

Case Presentation: The first patient is an 18-year-old male who presented with diminished vision since childhood. He had used spectacles for two years with little improvement. Best corrected visual acuity for distance and near was 6/36 and N12 in both eyes. Pendular nystagmus was present. The intraocular pressure was 10 mmHg bilaterally. He had disc pallor and atrophic macula with bull's eye maculopathy bilaterally. Hyperpigmented bone-spicule changes and attenuated vessels were restricted to the inferior and nasal retina bilaterally. (Figure 1a). Fundus autofluorescence showed hypoautofluorescent patches in the inferior and nasal hemiretina and alternating hyper- and hypo-fluorescent pattern at the macula, in a bull's eye pattern (Figure 1b). Optical coherence tomography (OCT) scan revealed retinal thinning with disruption of the ellipsoid layer, typifying photoreceptor loss (Figure 1c). Central visual field showed early ring scotoma pattern, and electroretinography showed reduced amplitudes in the photopic phase, reduced extinguished response in the scotopic phase across the whole retina.

The second patient is a 16-year-old male presenting with defective vision since childhood. Best corrected visual acuity was 6/36 in both eyes. Pendular nystagmus was present. The intraocular pressure was 12 mmHg bilaterally. Pale discs, attenuated vessels, symmetrical retinal pigment epithelium atrophic changes