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Photo essay

Optical Coherence Tomography Findings Of Photoreceptor-Retinal Pigment Epithelium Complex In Acute Traumatic Maculopathy

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Abstract *A young male patient presented with history of blunt injury to his left eye with defective vision. His fundus examination showed commotio-retinae inferiorly associated with Berlin's oedema. Optical coherence tomography imaging helped in identifying the damage at the level of photoreceptor-retinal pigment epithelium complex, and in grading the extent of tissue injury.*

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Keywords: *Berlin's Edema, Commotio-Retinae, Acute Traumatic Maculopathy*

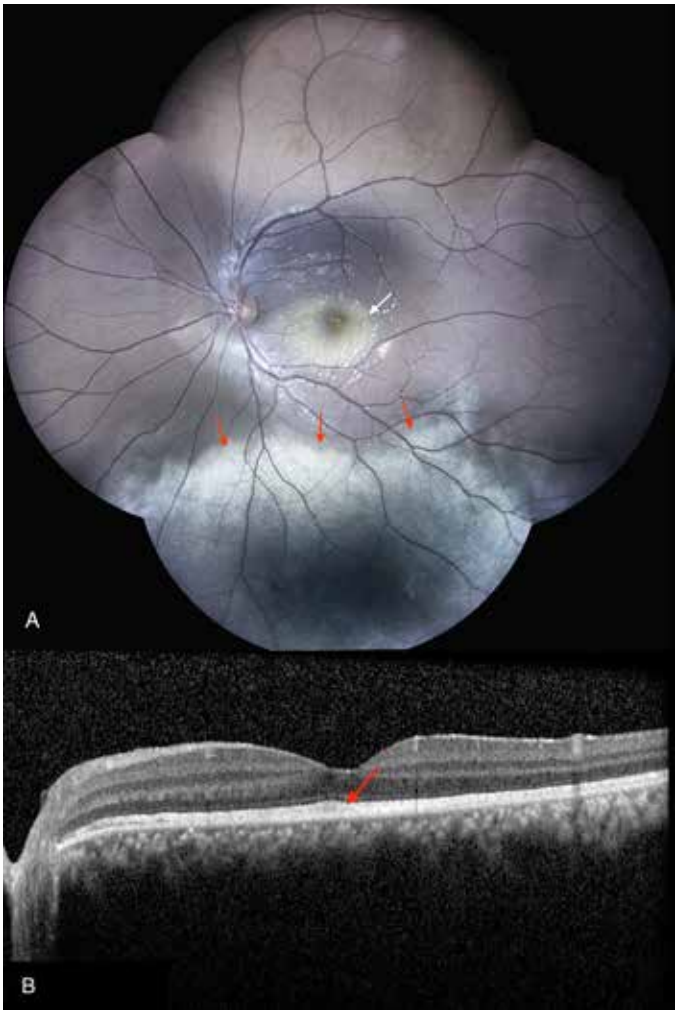

Figure 1: (*A). Mosaic colour fundus photograph of left eye showing commotio-retinae (red arrows) and Berlin's oedema (white arrow).*
(B). OCT macula of left showing increased reflectivity of the photoreceptor-retinal pigment epithelium complex (red arrow) with normal morphology of the inner layers.

A 19 year old male presented with injury to the left eye with cricket ball. His BCVA was 20/30 with fundus evaluation revealing inferior commotio-retinae and Berlin's edema (Figure 1A). Berlin's edema occurs at the level of the photoreceptor-retinal pigment epithelium complex.[1] OCT evaluation of macula revealed increased reflectivity in the area of the photoreceptor outer segment (Figure 1B) in the acute phase, and is probably reversible depending on the extent of the initial trauma.[2] Isolated hyper-reflectivity of the outer segment is an indication of mild injury with good visual recovery.[3]

References

1. Liem AT, Keunen JE, van Norren D. Reversible cone photoreceptor injury in commotio retinae of the macula. Retina Philadelphia Pa. 1995;15(1):58–61.
2. El Matri L, Chebil A, Kort F, Bouraoui R, Largueche L, Mghaieth F. Optical Coherence Tomographic Findings in Berlin's Edema. J Ophthalmic Vis Res. 2010 Apr;5(2):127–9.
3. Souza-Santos F, Lavinsky D, Moraes NS, Castro AR, Cardillo JA, Farah ME. Spectral-Domain Optical Coherence Tomography In Patients With Commotio Retinae: Retina. 2012 Apr;32(4):711–8

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