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Biography

Wiem Ben Elouaer, is an ophthalmology resident at the Department of Ophthalmology, Habib Bourguiba University Hospital, Sfax, Tunisia. Her clinical and academic interests include inflammatory eye diseases, retinal imaging, neuro-ophthalmology, cataract surgery, and complex diagnostic cases. She has contributed to several clinical case presentations and scientific communications in ophthalmology, with a particular focus on multimodal imaging and diagnostic challenges in ocular inflammation.

Posterior Scleritis Presenting as Orbital Cellulitis with Optic Disc Edema and Macular Folds : A Diagnostic Challenge

Abstract:

Posterior scleritis is an uncommon and potentially sight-threatening inflammatory disorder that may mimic orbital, optic nerve, or retinal diseases, leading to delayed diagnosis and inappropriate management. We report the case of a 24-year-old male who presented with a 10-day history of painful visual loss in the right eye. Clinical examination revealed eyelid edema, conjunctival hyperemia, a quiet anterior chamber and vitreous, optic disc edema, and macular and interpapillomacular retinal folds. Macular optical coherence tomography showed retinal folds with irregularity of the retinal pigment epithelium, while peripapillary OCT demonstrated diffuse retinal nerve fiber layer thickening. Fluorescein angiography revealed delayed venous filling and late papillary dye retention. B-scan ultrasonography showed the characteristic "T-sign", suggestive of posterior scleritis. Orbital computed tomography demonstrated findings consistent with orbital cellulitis associated with dacryoadenitis, dacryocystitis, scleritis, mild posterior intraconal infiltration, and grade I proptosis. An extensive etiological work-up including Quantiferon, syphilis, HIV, Lyme disease, rickettsiosis, bartonellosis, antinuclear antibodies, ANCA, and IgG4 testing was performed; syphilis and HIV serologies were negative. Differential diagnoses included neuroretinitis, optic neuritis, papilledema, retinal vascular disorder, and idiopathic orbital inflammation. However, the association of ocular pain, macular folds, optic disc edema, the ultrasonographic T-sign, and sclero-orbital inflammatory changes strongly supported posterior scleritis. This case highlights the importance of multimodal imaging and etiological assessment in distinguishing posterior scleritis from infectious, inflammatory, and neuro-ophthalmic mimickers.