A rare case of Listeria endogenous endophthalmitis – tips and pearls in treatment paradigm

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ABSTRACT

This report describes a rare case of right eye (RE) endogenous endophthalmitis secondary to Listeria monocytogenes. A 47-year-old Indonesian woman presented with RE sudden blurring of vision with redness and pain after 2 days post-partum. She has underlying gestational diabetes. Her RE visual acuity (VA) was counting fingers, while left eye VA was 6/9 (Snellen chart). There was no relative afferent pupillary defect. RE cornea was hazy with Descemet striae and fine keratic precipitates. A moving dense fibrin clot was noted in the anterior chamber, accompanied by dark brownish hypopyon level measuring 2.4 mm. Intraocular pressure (IOP) was elevated to 37 mmHg. Examinations of the left eye were unremarkable. B-scan ultrasonography of RE showed vitreous condensation with loculation. Vitreous tap was performed and sent for culture and microscopy examinations but no bacterial or fungal seen. Her blood culture revealed organism Listeria monocytogenes. She was given three doses of ceftazidime and vancomycin intravitreally and completed two weeks of intravenous ampicillin and oral ciprofloxacin. Topical gentamicin, ceftazidime, prednisolone and IOP-lowering agents were also initiated. Post-treatment, her RE VA improved to 6/9. RE cornea was clearer with small contracting fibrin clump and hypopyon has resolved. Fundus examination showed pink optic disc with no evidence of retinitis, choroiditis or vasculitis. Listeria monocytogenes is a rare pathogen of endophthalmitis. A high suspicious index should be raised in cases with dense fibrinous anterior chamber reaction, dark hypopyon and raised IOP. This can aid in early treatment and improve visual outcomes.