



Management of Retinal Detachment in Recurrent Cytomegalovirus (Cmv) Retinitis of Immunocompetent (Hiv-Negative) Patient – a Case Report

KEYWORDS

CMV retinitis (CMVR), HIV , Ganciclovir , polymerase chain reaction (PCR Immunocompetent.

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ABSTRACT Cytomegalovirus (CMV) retinitis is a rare disease which mainly affects patients with acquired immunodeficiency syndrome (AIDS) with a low CD4 cell count. We report a rare case of CMV retinitis in immunocompetent HIV negative patient and management of secondary complications associated with it.

Introduction –

Cytomegalovirus (CMV) retinitis is the most common ocular opportunistic infection associated with the acquired immunodeficiency syndrome (AIDS) even though its incidence has decreased since the introduction of highly active antiretroviral therapy^[1,2,3] it affects severely immunodepressed individuals (CD4 count < 50/mm)^[4]. It represents 90% cases of all infectious retinitis in this patient population^[5]. Cytomegalovirus retinitis appears as typical form, edematous or atypical form, indolent or perivascular form or as optic neuropathy. Pathogenesis of latent CMV is not well understood ^[6]. The common complications are macular damage (with marked decrease in visual acuity), optic neuropathy, optic nerve atrophy^[7,8] & retinal detachment. CMV-associated retinal detachment (CMVRD) is one of the commonest complications following CMV retinitis.

Case Report –

A 35 year female patient presented at our hospital with complains of diminution of vision, redness & pain in left eye. Slit-lamp examination revealed keratic precipitates, vitritis & acute retinal necrotic patches in left eye with visual acuity 2/60 ^[figure 1,2]. Right eye visual acuity found 6/6 with unremarkable examination. Aqueous humour polymerase chain reaction (PCR) study shows presence of cytomegalovirus (CMV) and Herpes simplex I/II (HSV) immunoglobulin. Patient was diagnosed to be human immunodeficiency virus (HIV) negative by standard test.



Figure 1

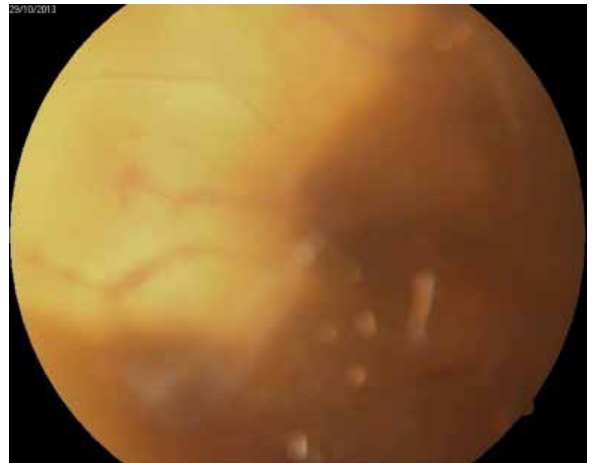


Figure 2

As the laboratory analysis confirmed the clinical diagnosis of systemic CMV infection with retinitis, Intravitreal ganciclovir 2mg was given in 2 doses 1 week apart with oral prednisolone(60mg/day) and valciclovir tablet (3md/day). After a good response for 2 months subtotal retinal detachment was found for which she was operated in the form of Pars-plana vitrectomy with Encirclage & heavy silicon oil(5000cst) injection. Right eye also shows signs of CMV retinitis after 5 months and given Intravitreal ganciclovir in 2 loading doses 1 week apart & 1 maintenance dose after 1 month. At 10 month of follow up patient is stable with no signs of active vitritis or retinitis with visual acuity 6/12 & 6/60 in right and left eye respectively^[figure 3,4].

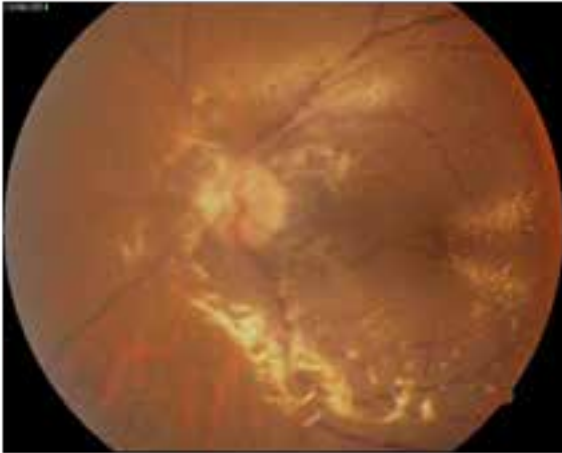


Figure 3

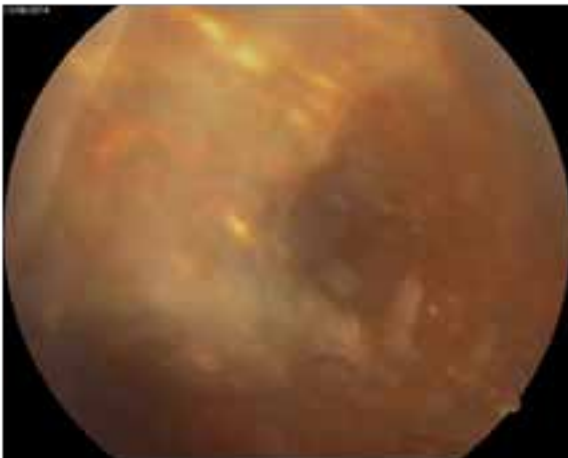


Figure 4

Discussion –

Cytomegalovirus-associated infections can develop in patients without HIV infection who has no evidence of immune insufficiency. Studies showed that severe visual loss was significantly associated with the occurrence of RD (69% of the eyes with RD vs. 8% of the eyes without RD) in CMV retinitis eyes[2]. Various surgical options can be used for management of RD including Parsplana vitrectomy with Silicon oil or gas tamponade, laser photocoagulation, pneumatic retinopexy, and Scleral buckle or combination of these. Retinal detachment in such case has been difficult to manage because thin, atrophic retina which requires tamponade by silicon oil[10,11]. Use of High Density silicon oil could lead to better surgical outcome and lesser recurrence of retinal detachment with good long term prognosis. This case demonstrated more variable clinical presentation & required more vigorous management than Classic CMV retinitis observed in patients with HIV infection.

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