



Intravitreal Anti-VEGF Injection in Recurrent Vitreous Hemorrhage in Eales's Disease: A Case Report

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Abstract

Study design: case report

Purpose: to evaluate the efficacy of intravitreal bevacizumab in vitreous hemorrhage in Eales' disease

Methods: A 37year old male patient presented to our out-patient department in Manjunatha Eye hospital, Kundapura, Udupi district with sudden diminution of vision in his right eye since 1month. He was found to have a vision of hand movements in Right eye His fundus examination revealed dense vitreous hemorrhage with supero-temporal quadrant showing yellowish retinal patch with irregular margins suggestive of retinitis, and peripheral retinal vessels showing signs of vasculitis. All investigations were negative. He was given three intravitreal injection bevacizumab 1.25mg in 0.05ml on monthly basis.

Results: patient improved to 6/6 vision by the end of 3months without increase in IOP

Conclusion: Intravitreal bevacizumab injections effectively resolves the vitreous hemorrhage in Eales' disease thereby avoiding the surgical intervention.

Keywords: recurrent, Intravitreal, hemorrhage, bevacizumab

Introduction

Eales disease classically presents with repeated vitreous hemorrhage in young adults. It is most commonly found in the Indian subcontinent ^[1]. It commonly affects the peripheral fundus and is characterized by retinal vasculitis. Conventionally, systemic and local corticosteroids serve as mainstay of management ^[2]. Anti-VEGF injections are newer and more effective in controlling vitreous hemorrhage.

Case report

A 37year old male patient presented to our out-patient department in Manjunatha Eye hospital, Kundapura, Udupi district with sudden diminution of vision in his right eye since 1month. On examination, he was found to have a vision of hand movements in Right eye and normal anterior segment, intraocular pressure. His fundus examination with indirect ophthalmoscope revealed dense vitreous hemorrhage with supero-temporal quadrant showing yellowish retinal patch with irregular margins suggestive of retinitis, and peripheral retinal vessels showing signs of vasculitis. (Fig1) Left eye was within normal limits.

Patient had a past history of similar episode in the same eye one year ago and was treated with anti-inflammatory eye drops and was given a single dose of intravitreal bevacizumab injection at a local ophthalmologist and was lost to follow up.

Detailed systemic evaluation was done with all necessary blood investigations, serological tests, immunological tests, chest Xray, Ultrasound abdomen. All of which showed negative results.

Hence patient was diagnosed as Eales's disease, as a diagnosis of exclusion. Investigations also ruled out association with tuberculosis.

He was treated with three intravitreal injection bevacizumab 1.25mg in 0.05ml on a monthly basis along with oral prednisolone 1mg/kgbw once a day and topical prednisolone acetate 1.0% 1drop 4times a day and nepafenac 0.3% once a day.

Procedure: Under aseptic precautions, Intravitreal bevacizumab 1.25mg/0.05ml injected using a sharp tipped 30 gauge needle in inferotemporal quadrant of the eye under topical anesthesia. Following injection, topical antibiotic was instilled and eye was patched for 2 hours. Oral acetazolamide 250mg tablet was given to all the patients after the injection.

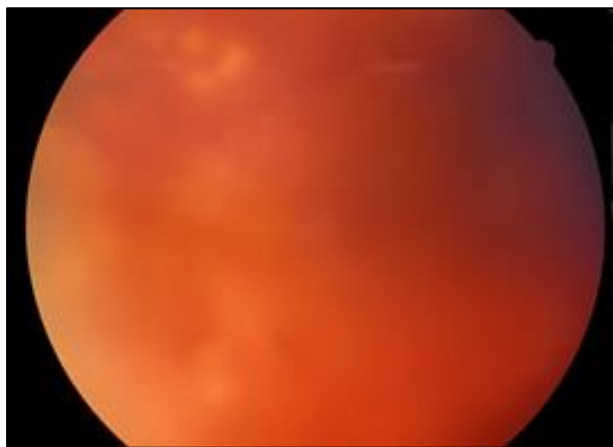


Fig 1: Presence of Vitreous Hemorrhage



Fig 2: Characteristic of Papilledema

Patient was followed up at 1week post injection and there after 2 weekly. He was found to have a vision of 6/12, normal intraocular pressure and fundoscopy showed resolving vitreous hemorrhage with completely resolved retinitis patch at the end of 3months after completing 3doses of intravitreal anti-VEGF. (Fig2) Patient was then maintained with oral prednisolone in weekly tapering dose and topical anti-inflammatory medications. At the end of 6months, patient had a uncorrected visual acuity of 6/6p and best corrected visual acuity of 6/6 (-0.50DC @180°). Fundus examination revealed completely resolved vitreous hemorrhage with no signs of retinal inflammation. Later patient was followed up for a period of 15months on 2monthly basis and was found to maintain the normal vision without any visual disturbances.

Discussion

Timely regression of neovascularization is important to avoid vitreous hemorrhage and tractional retinal detachment requiring vitreoretinal surgery [3]. In a recent study from India, where Eales' disease is relatively common, the beneficial effect of intravitreal bevacizumab in a patient with presumed Eales' disease has been reported [4]. Bevacizumab

has been shown to be effective in regressing neovascularization and mild hemorrhage secondary to Eales disease, if given every 4 weeks, thereby hastening the process of resolution of dense vitreous hemorrhage or reduce the need for vitrectomy [5].

Conclusion

Intravitreal bevacizumab injections effectively resolves the vitreous hemorrhage in Eales' disease thereby avoiding the surgical intervention.

References

1. Biswas J, Ravi RK, Naryanasamy A, Kulandai LT, Madhavan HN. Eales' disease - current concepts in diagnosis and management. *Journal of Ophthalmic Inflammation and Infection*. 2013;3(1):11.
2. Khan MN, Raza SS, Qadir S, Rehman H, Hussain AK, Nadeem MD, Ullah F. Eales Disease. *Journal of Ayub Medical College Abbottabad*. 2016;28(4):816-7.
3. Biswas J, Ravi RK, Naryanaswamy A, Kulandai LT, Madhavan HN. Eales' disease: current concepts in diagnosis and management. *Journal of Ophthalmic Inflammation and Infection*. 2013;3(1):11.
4. Patwardhan SD, Azad R, Shah BM, Sharma Y. Role of intravitreal bevacizumab in Eales' disease with dense vitreous hemorrhage: a prospective randomized control study. *Retina*. 2011;31:866-70.
5. Chanana B, Azaad RV, Patwardhan S. Role of bevacizumab in the management of Eales' disease. *International Ophthalmology*. 2010;30:57-61.

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