



## Retina Pictorial Essay

# Intravitreal triamcinolone acetonide in Berger space: A rare complication

Brajesh Lahri<sup>1</sup>, Ayushi Sinha<sup>1</sup>, Sai Vineeth Maddu<sup>1</sup>

<sup>1</sup>Dr. RP Centre for Ophthalmic Sciences, AIIMS Delhi, New Delhi, India.



### \*Corresponding author:

Brajesh Lahri,  
Dr. RP Centre for Ophthalmic  
Sciences, AIIMS Delhi,  
New Delhi, India.

[drbrajeshlahri@gmail.com](mailto:drbrajeshlahri@gmail.com)

Received : 02 December 2022

Accepted : 14 December 2022

Published : 05 January 2023

### DOI

10.25259/LAJO\_12\_2022

### Quick Response Code:



## ABSTRACT

We report the case of a 50-year-old male who presented with a diminution of vision in his right eye for the past 6 months and was subsequently found to have central retinal vein occlusion with macular edema. The patient was given intravitreal triamcinolone in view of non-resolving macular edema despite repeated injections of anti-vascular endothelial growth factor. We report this rare occurrence of accidental injection of intravitreal triamcinolone acetonide in Berger space. A careful slit lamp examination before to look for the presence of prominent Berger space in patients planned for intravitreal injections, along with proper counseling of patients to avoid unwanted eye movements during an injection, can be potential ways to prevent such complications. In our case, the triamcinolone resolved after 6 weeks and the intraocular pressure (IOP) spike was managed using glaucoma medications. It is imperative to measure IOP at each visit in these patients and if spikes are noted, they should be managed accordingly.

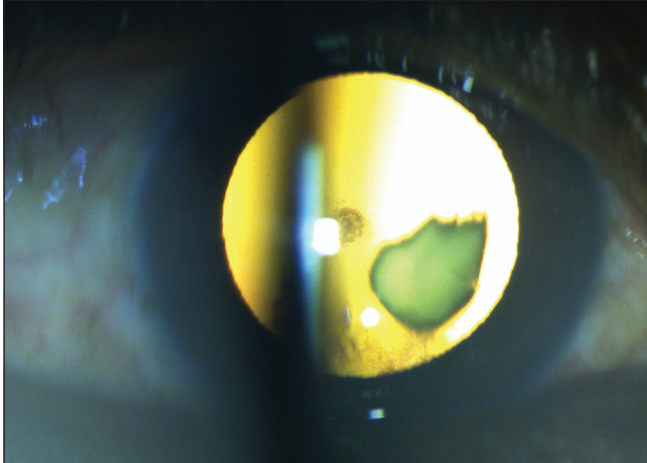
**Keywords:** Intravitreal injections, Triamcinolone, Central retinal vein occlusion, Berger space, Complications of intravitreal injections

## CASE REPORT

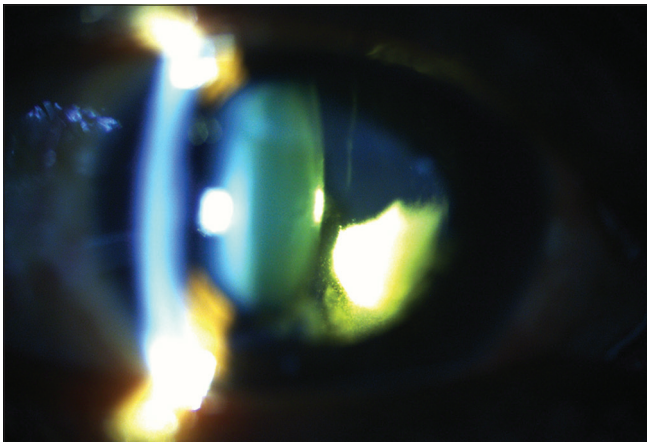
We report the case of a 50-year-old male who presented with a diminution of vision in his right eye for the past 6 months and was subsequently found to have Central Retinal Vein Occlusion with macular edema. There was no prior history of eye blunt trauma. The Snellen BCVA in RE was 6/36 and LE 6/6. The patient had already received 3 Inj. Bevacizumab 1.25 mg/0.05 mL before presenting to us, but did not report significant improvement in his vision. At presentation, intraocular pressure (IOP) was 18 mm Hg in both eyes as determined by Goldmann applanation tonometry. The optic disc had CDR 0.3:1 in both eyes and the neuroretinal rim was healthy. We decided to give the patient intravitreal triamcinolone in view of non-resolving macular edema despite repeated injections of anti-vascular endothelial growth factor (VEGF). The patient received the intravitreal injection with total aseptic precautions. The intravitreal triamcinolone acetonide was injected at 4 mm from the limbus under the microscope, after instilling multiple cycles of proparacaine and 5% of betadine solution. The patient presented the next day and was found to have triamcinolone in the Berger space. Accidental injection of intravitreal Anti-VEGF in the Berger space has been described before.<sup>[1]</sup> It is for the 1<sup>st</sup> time, we report this rare occurrence of accidental injection

This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 4.0 License, which allows others to remix, transform, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

©2023 Published by Scientific Scholar on behalf of Latin American Journal of Ophthalmology



**Figure 1:** Slit lamp examination using retroillumination showing triamcinolone in Berger space.



**Figure 2:** Slit lamp examination showing triamcinolone in Berger space with crystalline clear lens.

of intravitreal triamcinolone acetonide in Berger space [Figures 1 and 2]. A careful slit lamp examination before to look for the presence of prominent Berger space in patients planned for intravitreal injections, along with proper counseling of patients to avoid unwanted eye movements during an injection, can be potential ways to prevent such complications. In our case, the triamcinolone resolved after 6 weeks, and the IOP spike was managed using glaucoma medications. It is imperative to measure IOP at each visit in these patients and if spikes are noted, they should be managed accordingly.

#### **Declaration of patient consent**

The authors certify that they have obtained all appropriate patient consent.

#### **Financial support and sponsorship**

Nil.

#### **Conflicts of interest**

There are no conflicts of interest.

#### **REFERENCE**

1. Shah PR, Sachan A, Chandra P. Retrolental hemorrhage in Berger's space after intravitreal bevacizumab injection for retinopathy of prematurity. *J Pediatr Ophthalmol Strabismus* 2020;57:e71-3.

**How to cite this article:** Lahri B, Sinha A, Maddu SV. Intravitreal triamcinolone acetonide in Berger space: A rare complication. *Lat Am J Ophthalmol* 2023;6:1.