# **A Rare Clinical Presentation of Herpes Zoster Ophthalmicus**

Dr. Dinesh P<sup>1,</sup> Dr. Pranitha Prabhu<sup>2</sup>

**Abstract:** Herpes zoster (HZ) or 'shingles' results from reactivation of the Varicella zoster virus (VZV). VZV reactivation commonly affects the ophthalmic division of the trigeminal nerve (10-25%) and subsequently the eye. Here is a rare presentation of herpes zoster involving the maxillary(v2) division of trigeminal nerve and cornea.

Keywords: herpes zoster, maxillary nerve, varicella zoster virus.

**Case Report** 

## I. Introduction

A 33 year old male presented to ophthalmology OPD with swelling and redness in the left eye since 3days. Which was sudden in onset and progressive in nature. Patient gives history of pain 3days back for which he has taken a oral analgesics. He describes a blister formation which was limited to lower eyelid from past 3days. On examination, his BCVA in RE 6/6 and 6/24 in LE. left lower eyelid was red, edematous with ulceration and crusts. Anterior chamber slit lamp exam showed cornea hazy, edematous, decreased sensation with no cell and flare. Fluorescein staining showed branched dendritic corneal lesion. Fundoscopic exam revealed no pathology. Intraocular pressures were normal bilaterally. Extraocular movements were intact with no diplopia. The patient was started on oral acyclovir (800mg five times/day) and a topical acyclovir 3% eye ointment and cycloplegic.

### II. Discussion

Herpes Zoster Ophthalmicus is an ocular disease which usually manifests as a unilateral painful skin rash in a dermatomal distribution of the trigeminal (V cranial) nerve with involvement of the ophthalmic (V1), maxillary (V2) or mandibular (V3) branch.<sup>1</sup> It is an interesting clinical entity for the clinicians.Classically, HZO begins with flu-like symptoms including fever, myalgia, and malaise for approximately one week. HZO occurs typically in older adults but can present at any age and occurs after reactivation of latent varicella-zoster virus (VZV)<sup>2</sup>.

The anatomic location of the involved dermatome often determines the specific manifestations. When cervical and lumbar roots are involved, motor involvement, which is often overlooked, may be evident, depending on the virulence or extent of migration<sup>3</sup>. Herpes zoster infections are contagious to persons with no previous immunity to VZV. However, herpes zoster is estimated to be only one third as contagious as primary varicella. It is transmitted either via direct contact with the lesions or via the respiratory route<sup>4</sup>.

Fifty percent to 70% of patients have ocular involvement if the first division of the fifth cranial nerve is involved.<sup>5</sup> Viral infection and subsequent inflammation can affect all ocular structures. Corneal scarring and uveitis with secondary cataract, glaucoma and macular edema are especially worrisome possibilities. Corneal staining and mucoid plaques may serve as signals that these serious involvements are on the way.<sup>6</sup> Upon presentation of herpes zoster ophthalmicus, it is critical to initiate systemic treatment with oral antiviral. Research has shown the benefit of systemic therapy if instituted within 48 hours of vesicular outbreak.<sup>7</sup> Beyond 72 hours, its efficacy is diminished though it may still be helpful.

The patient returned 5 days after his initial presentation for a follow-up examination, and he reports improved vision and less forehead pain and overall discomfort. Vision in his right eye remains 6/6, and vision in his left eye has improved to 6/12. corneal haze and oedema was reduced. The patient continues his treatment at the same doses.

### III. Conclusion

Typical HZO is an easy diagnosis to make based on history and skin findings. A typical presentation of HZO should be diagnosed early in order to ensure proper follow up and to minimize morbidity. Occasionally HZO presents as an isolated ophthalmologic process that is difficult to distinguish from other more benign causes of a red eye.

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Herpes zoster ophthalmocus involving infra orbital margin.