



Ophthalmic Herpes Zoster: A Rare Pediatric Dermatological Condition

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Abstract

Herpes zoster, resulting from the reactivation of the varicella-zoster virus (VZV) which remains dormant in the dorsal root ganglia following chickenpox, is uncommon in children, particularly its ophthalmic form. This form can lead to severe ocular complications, necessitating timely and appropriate management. It may sometimes be accompanied by postherpetic neuralgia, making treatment challenging. Oral acyclovir, administered within 72 hours of rash onset, has been demonstrated to prevent ocular complications effectively. This communication presents a new case in a 9-year-old immunocompetent boy with no history of prior chickenpox.

Introduction

Herpes zoster stems from the reactivation of the varicella-zoster virus (VZV) that stays dormant in the dorsal root ganglia after an initial chickenpox infection. Pediatric herpes zoster is rare, with the ophthalmic variety being particularly uncommon. This form can cause serious ocular complications requiring early and proper intervention. We report a new case herein.

Patient and Observation

A 9-year-old boy, with no significant past medical history including no known neonatal or maternal chickenpox during pregnancy or in the perinatal period, nor similar episodes, presented to the emergency department with a painful rash affecting the forehead, upper eyelid, and nose for 3 days. Examination revealed a fever-free child with multiple vesicles grouped in clusters on an erythematous skin, affecting the right side of the nose, right hemi-forehead, along with swelling of the upper and lower right eyelids, making eye opening difficult (Figures 1, 2). Slit-lamp examination and fundoscopy were unremarkable. A diagnosis of ophthalmic herpes zoster was made, and the child was treated with oral acyclovir. Clinical improvement was noted with the reduction of swelling and pain. A basic immune evaluation was conducted, including complete blood count, glucose level, and HIV serology, all of which returned normal. The patient has been followed up for 2 years with no recurrence or postherpetic neuralgia.



Figure 1



Figure 2

Discussion

Ophthalmic herpes zoster represents a rare clinical manifestation of herpes zoster in children. It is a potentially severe infection functionally, due to the latent reactivation of VZV located in the Gasser's ganglion, which migrates along the ophthalmic nerve, the V1 branch of the trigeminal nerve. The frontal, nasociliary, and lacrimal branches of nerve V can be simultaneously or individually affected. The risk factors for pediatric herpes zoster remain unclear, but it is not associated with malignant conditions as in adults. A few cases have been reported in infants exposed to maternal chickenpox during pregnancy. Ocular

complications occur in 50 to 70% of cases and often have a guarded prognosis, primarily including keratitis, conjunctivitis, uveitis, retinitis, retinal necrosis, glaucoma, and retinal necrosis. Neurological complications, though rare, can include myelitis, meningoencephalitis, motor and ocular motor paralysis, and bladder and digestive dysfunction. The pediatric form is characterized by a predominance of general symptoms, generally favorable outcomes, and the rarity of postherpetic neuralgia.

Conclusion

This case highlights the occurrence of ophthalmic herpes zoster in an immunocompetent child without a history of prior chickenpox, underscoring its rarity in pediatric patients.

Conflict of Interest

The authors declare no conflicts of interest.

Author Contributions

All authors have made substantial contributions to the conception and design of the work; they also declare to have read and approved the final version of the manuscript, Figures.

References

1. Aktaş, H., Erdal, S. A., & Güvenç, U. (2019). Herpes Zoster in children: Evaluation of the sixty cases. *Dermatologic therapy*, 32(6), e13087.
2. Feder Jr, H. M., & Hoss, D. M. (2004). Herpes zoster in otherwise healthy children. *The Pediatric infectious disease journal*, 23(5), 451-457.
3. Soeteman, M., Willems, R. P., & Busari, J. O. (2012). Herpes zoster ophthalmicus in an otherwise healthy 2-year-old child. *Case Reports*, 2012, bcr2012007015.
4. Leung, A. K., & Barankin, B. (2015). Herpes zoster in childhood. *Open Journal of Pediatrics*, 5(01), 39.
5. Tucker, S. M. (1958). Herpes zoster ophthalmicus in children. *Archives of Disease in Childhood*, 33(171),

437.

6. Rousseau, A., Bourcier, T., Colin, J., & Labetoulle, M. (2013). Herpes Zoster Ophthalmicus--Diagnosis and Management. *US Ophthalmic Review*, 6(2).

