

COMMENT



Herpes zoster ophthalmicus: COVID-19 impact and clinical implications

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A literature review was conducted to investigate the prevalence of Herpes Zoster Ophthalmicus (HZO) using peer-reviewed publications in the National Library of Medicine. Snyder et al. analyzed the incidence of Herpes Zoster (HZ) and Herpes Zoster Ophthalmicus (HZO) in relation to the COVID-19 pandemic from 2018 to 2021 [1]. Their study included 16,287 HZ cases, with 7.94% presenting with HZO. Despite a yearly decrease of 5.3% in HZ incidence, HZO incidence increased by 5.6% annually. Post-COVID, the average HZO incidence was significantly higher than pre-COVID. Their results suggested a distinct mechanism for HZO appearance, potentially accelerated by the pandemic [1].

1,959,157 patients who met the eligibility criteria were administered a COVID-19 vaccine [2]. The analysis included 80 individuals who, despite having no previous history of HZO, developed the condition in the risk or control period. The average age of these patients was 54.0 years, with a standard deviation of 12.3 years. Post COVID-19 vaccination, 45 instances of HZO were reported in the risk interval [2].

Cerebral venous sinus thrombosis, a rare stroke cause, was prevalent in younger patients, especially females, and was linked with pregnancy, oral contraception, thrombophilia, and malignancy [3]. It's also associated with infections, COVID-19, and the AstraZeneca vaccine. Rarely, it's linked with varicella zoster virus and herpes zoster virus infections. Their report presented a case of a 68-year-old woman with herpes zoster ophthalmicus ophthalmoplegia who developed cerebral venous thrombosis [3].

HZO is a reactivation of the latent varicella zoster virus in the ophthalmic division of the fifth cranial nerve (CNV1) [4]. It's common in older and immunocompromised patients, presenting as a unilateral vesicular eruption in the CNV1 dermatomes. HZO was an ophthalmic emergency due to potential severe chronic pain and vision loss. With ocular involvement in 50% of cases, timely treatment was crucial to minimize ocular morbidity [4].

HZO, caused by the reactivation of the Varicella-zoster virus, primarily affected the ophthalmic division of the trigeminal nerve [5]. Sanayama et al. discussed a 61-year-old Japanese male initially diagnosed with cluster headache due to delayed cutaneous eruption, a key diagnostic feature of HZO. Despite interventions for cluster headache, there was no fluctuation in headache severity. The case emphasized the importance of distinguishing

HZO from cluster headache, especially in elderly patients or those with persistent cephalo-ophthalmalgia. Cerebrospinal fluid analysis was recommended when HZO is suspected [5].

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AUTHOR CONTRIBUTIONS

Yoshiyasu Takefuji completed this research and wrote this article.

COMPETING INTERESTS

The author declares no competing interests.

ADDITIONAL INFORMATION

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