

Teaching NeuroImages: Hutchinson Sign in Herpes Zoster Ophthalmicus

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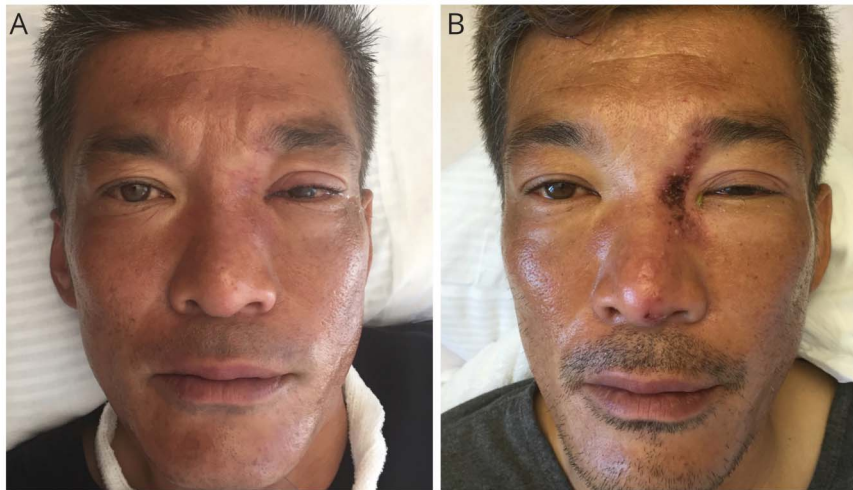
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Figure 1 Hutchinson Sign in Herpes Zoster Ophthalmicus



Lacrimation and conjunctival injection in the left eye with periorbital edema were evident on day 7 (A). On day 10, zoster appeared in the root, dorsum, and apex of the nose, which is known as Hutchinson sign (B).

A 42-year-old immunocompetent man developed left-sided orbital and temporal stabbing pain, accompanied by ipsilateral lacrimation and conjunctival injection with periorbital edema (figure 1A). On day 10, Hutchinson sign, which is defined as zoster skin lesions in the root, dorsum, and apex of the nose,¹ became evident with severe keratoconjunctivitis and iritis (figure 1B). PCR testing of blood revealed varicella-zoster virus and he was diagnosed with herpes zoster ophthalmicus (HZO). Hutchinson sign indicates the involvement of the nasociliary nerve, a branch of ophthalmic nerve innervating the eyelid, nose, and eye (figure 2), and is the strong predictor of the ocular complications of HZO.^{1,2} Compared to HZO in the absence of Hutchinson sign, the presence of Hutchinson sign indicates a 3.4-fold increase in the risk of developing ocular inflammation and a 4-fold increase in the risk of developing corneal denervation.²

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Disclosure

The authors report no disclosures relevant to the manuscript. Go to Neurology.org/N for full disclosures.

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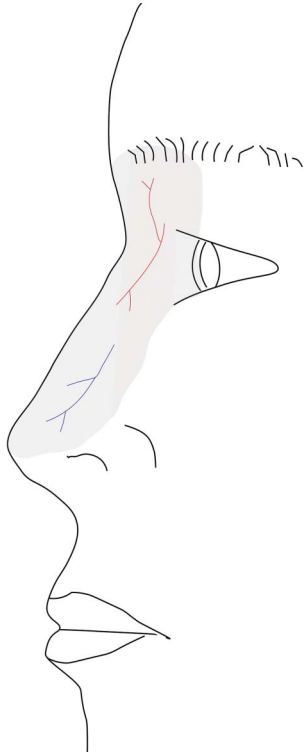
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Figure 2 Distribution of the Nasociliary Nerve



The dermatome of the nasociliary nerve is shown with the infratrochlear (red) and the external nasal (blue) nerve branches.

Appendix Authors

Name	Location	Contribution
Eiichiro Amano, MD	Tsuchiura Kyodo General Hospital	Designed and analyzed the data, major role in the acquisition of data
Akira Machida, MD, PhD	Tsuchiura Kyodo General Hospital	Interpreted the data

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