Barry Hahn, MD
Nicole Arnold, BS, MS
Nina Roth

From the Department of Emergency Medicine, Staten Island University Hospital, Staten Island, NY.

0196-0644/$-see front matter

doi:10.1016/j.annemergmed.2007.06.489

Figure 1. Painful rash in facial nerve distribution.

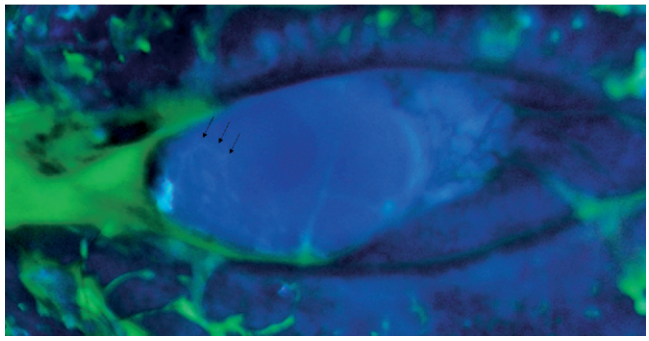

Figure 2. Fluorescein stain demonstrating dendritic pattern.

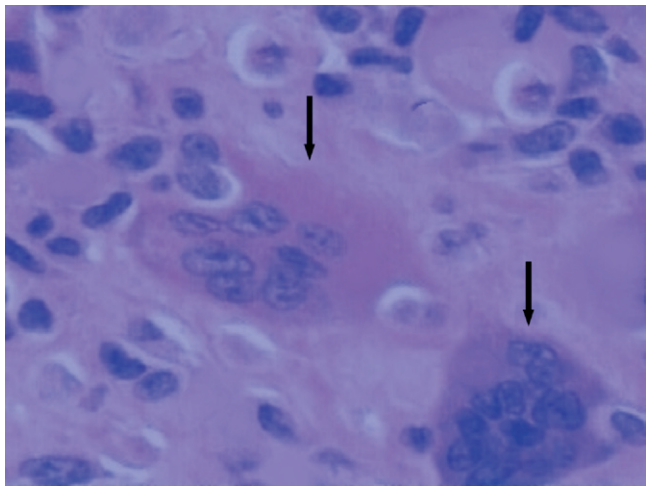

Figure 3. Tzanck smear showing multinucleated giant cells. Used with permission of Barry Hahn, MD, Department of Emergency Medicine, Staten Island University Hospital, Staten Island, NY.

[Ann Emerg Med. 2008;51:211.]

An 80-year-old woman complained of a painful facial rash for 1 week (Figure 1). She also reported eye pain, photophobia, blurred vision, tearing, and redness.

Physical examination was significant for partially crusted, grouped vesicles on the forehead, upper eyelid, and nose in a dermatomal distribution. Fluorescein stain revealed a dendritic pattern (Figure 2). Tzanck smear showed multinucleated giant cells (Figure 3).

For the diagnosis and teaching points, see page 219.
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DIAGNOSIS:

Herpes zoster ophthalmicus with ocular involvement. Herpes zoster ophthalmicus occurs when varicella zoster virus is reactivated in the ophthalmic division of the trigeminal nerve. Individuals older than 70 years and immunocompromised persons have a higher incidence of infection. Papules and vesicles appear along the involved dermatome. These lesions rupture and crust over. Hutchinson's sign, which is the involvement of the nose, is a predictor of ocular involvement because the nasociliary nerve also innervates the cornea.

Emergency department treatment includes local care, oral analgesics, and antiviral therapy. Studies report alleviation of pain with acyclovir, especially if taken within 3 days of symptom onset. Corticosteroids in combination with antiviral agents reduce pain but do not consistently affect postherpetic neuralgia. Because there is an increased risk of disseminated infection with corticosteroid use, steroids should not be initiated without ophthalmologic consultation.

Admission should be considered for multiple dermatomal involvement, immunocompromised conditions, and significant bacterial superinfection. If patients are discharged, they should be reevaluated within 1 week.

In nonimmunocompromised individuals, recurrence is extremely low. Inflammation during herpes zoster ophthalmicus can lead to lid scarring and exposure, corneal scarring, neurotrophic keratitis, and postherpetic neuralgia.