



Herpes zoster ophthalmicus: Pre-eruption phase sine herpette

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1. Case report

A 78-year-old female presented with a five-day history of constant and worsening left brow and temple pain, epiphora, redness, blurred vision and photophobia in the left eye (OS). The pain was somewhat relieved by palpation. She denied jaw claudication, fevers, headaches, and weight loss. She was seen by an ophthalmologist two days prior and diagnosed with blepharoconjunctivitis and keratoconjunctivitis sicca for which neomycin-polymyxin-B-dexamethasone ointment and artificial tears were prescribed without improvement. Best-corrected visual acuity was 20/40 in the right eye (OD) and 20/60 OS. Extraocular movements, confrontation visual fields, intraocular pressure and pupil exam were normal in both eyes (OU). She had mild left upper lid ptosis and subconjunctival hemorrhage OS. Fundus exam was normal OU. Erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP) levels were normal. Given the relief by palpation and overall clinical presentation, the diagnosis of herpes zoster ophthalmicus (HZO) without skin findings (pre-eruption phase herpes zoster (HZ) sine herpette) was made and the patient was told to be vigilant for the development of left V1 cutaneous vesicular eruption over the next few days. Pre-eruption photographs were taken to document the lack of the rash (Fig. 1) although there was mild erythema noted which could have been a potential clue to the diagnosis and was attributed in part to rubbing the forehead due to the underlying paresthesia. She was started on empiric prednisone 60 mg for possible giant cell arteritis (GCA) while awaiting laboratory studies and consideration for a temporal artery biopsy (TAB). One day later, the patient reported the development of

the vesicular eruption. She took self-photographs (Fig. 2) and the diagnosis of HZO was made. The patient was then started on oral acyclovir 1 gm three times daily. At one week follow up, evidence of HZ keratitis and iritis were noted, the rash remained (Fig. 3), and her condition was otherwise stable and treated medically.

2. Discussion

HZO represents reactivation of dormant herpes zoster manifesting in the dermatome of the ophthalmic branch of the trigeminal nerve. Ophthalmic complications (including keratitis, anterior uveitis, and plaque formation) occur in 2.5% of HZ cases.¹ This case was initially considered as possible HZO sine herpette. Although no vesicular eruption was present at initial neuro-ophthalmic consultation several features suggested HZO: 1) dermatomal V1 distribution of pain; 2) partial pain relief with palpation; 3) lack of other symptoms to suggest GCA; and 4) normal acute phase reactant levels.

Although GCA should be considered as the initial diagnosis in any elderly patient with new onset face, eye, head, ear, temple, or neck pain, the patient denied jaw claudication, fever, malaise, weight loss, or polymyalgia rheumatic symptoms. Interestingly, a clinical feature one author (AGL) has found useful in differentiating the pain of GCA from that of HZO is that some patients with HZO achieve relief with rubbing the affected area, in contrast to the scalp tenderness and avoidance of palpation seen in GCA (e.g., avoiding combing the hair on that side).

In summary, elderly patients who present with scalp or face pain should be evaluated for GCA but the possibility of HZO sine herpette

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Fig. 1. Photograph of patient upon presentation, one day before vesicle eruption. The patient reported that “rubbing the forehead over the left brow” improved her pain symptoms and produced the slight erythema seen.



Fig. 2. Day one of cutaneous vesicular rash eruption along the ophthalmic nerve dermatome.



Fig. 3. One week after vesicle eruption.

should be considered in the differential diagnosis. Patients should be vigilant for the development of the characteristic HZO rash. Some patients may have elevated acute phase reactants or been started on corticosteroid therapy prior to the development of the vesicular eruption. Obtaining a TAB might even show granulomatous or small vessel vasculitis from HZO further confounding the diagnosis of GCA.^{2,3}

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Authorship

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