Internal Carotid Artery Involvement in Herpes Zoster Ophthalmicus

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A 66-year-old man with diabetes mellitus developed zoster in the distribution of the right ophthalmic nerve (V1), and underwent famciclovir 1,500 mg/day. Five days later, despite improvement of zoster, right abducens nerve palsy developed. Cranial and orbital magnetic resonance (MR) imaging findings were normal. Cranial MR angiography demonstrated localized wall irregularity at the cavernous portion of the right internal carotid artery (ICA) (Picture A-D. D: Magnification of B. arrows). Under clopidogrel treatment (75 mg/day), abducens nerve palsy disappeared within 14 days, and MR angiography finding normalized within 2 months.

Herpes zoster ophthalmicus is defined as ocular symptoms secondary to zoster in the distribution of V1, which commonly demonstrates periorbital vesicular rash, conjunctivitis, keratitis and uveitis, and rarely, peripheral ophthalmoplegia (1) and granulomatous arteritis (2). However, the etiology of peripheral ophthalmoplegia remains unclear. The present case suggested that the abducens nerve and ICA might be involved by varicella zoster virus in the cavernous sinus.

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References
