

[ PICTURES IN CLINICAL MEDICINE ]

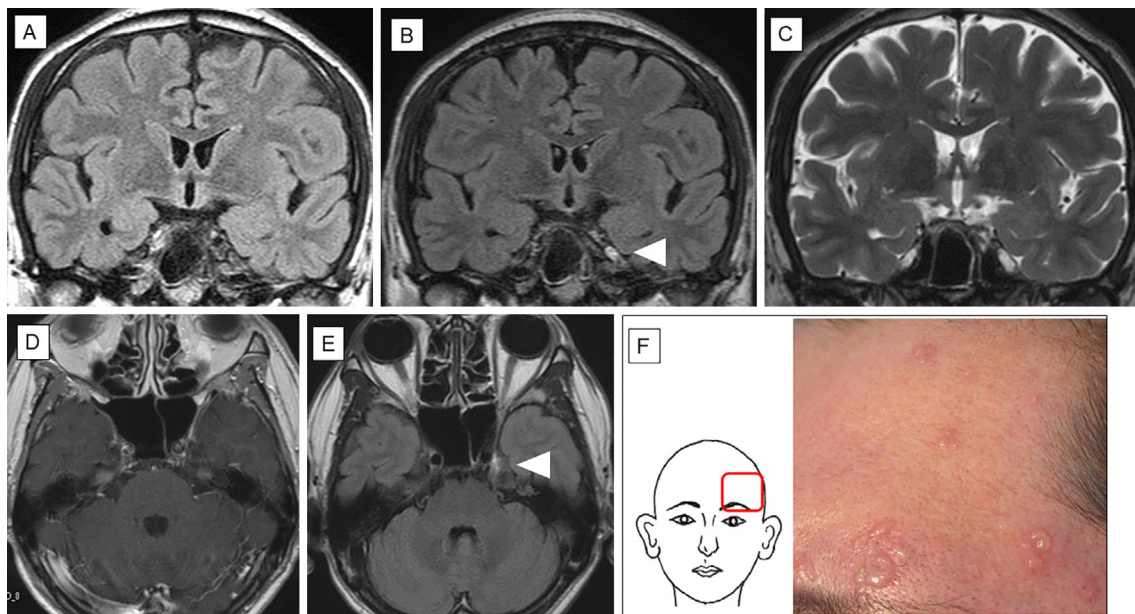
## Enhancement of the Trigeminal Nerve by VZV Reactivation

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**Key words:** varicella-zoster virus, trigeminal nerve, MRI

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**Picture.**

A man in his late 30s who was being treated for anaplastic anemia had severe headache. His intermittent attacks of excruciating unilateral headache lasted for several days, thus indicating a cluster headache (1). Treatment with sumatriptan and high-flow oxygen could not improve his headache. A neurological examination revealed intense paroxysmal neuralgia along the left first trigeminal nerve branch. Compared with FLAIR imaging (Picture A), FLAIR-gadolinium (Gd)-enhanced MRI (Picture B) showed enhancement of the left trigeminal nerve, which did not demonstrate a high signal intensity on T2-weighted images (Picture C). A Gd-enhanced T1W image (Picture D) did not show any remarkable enhancement of the left trigeminal nerve compared with FLAIR-Gd-enhanced MRI (Picture E). Although a cerebrospinal fluid (CSF) study showed a normal cell count and normal protein level, varicella-zoster virus (VZV) was de-

tected by PCR in CSF. A diagnosis of trigeminal neuritis due to VZV reactivation was made. Treatment with intravenous acyclovir (1,500 mg, 2 weeks) and methylprednisolone (1,000 mg, 3 days) improved his symptoms including neuralgic pain. Several days later, some vesicles appeared on his left forehead (schematic illustration) in the trigeminal nerve territory (Picture F) and finally spread throughout his body. Although VZV reactivation is a common neurological infectious disease, only a few studies have shown contrast enhancement of the cranial nerve caused by VZV neuritis (2, 3). This case highlights the importance of performing FLAIR-Gd-enhanced MRI in order to accurately detect VZV neuritis.

**The authors state that they have no Conflict of Interest (COI).**

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