

**Case Report****RAMSAY HUNT SYNDROME: A CASE REPORT***Rizaldy Taslim Pinzon<sup>1</sup>, Priska Gian Gavrila<sup>2</sup>*<sup>1</sup>Neurology Department Bethesda Hospital, Yogyakarta; [drpinzon17@gmail.com](mailto:drpinzon17@gmail.com)<sup>2</sup>Duta Wacana Christian University School of Medicine, Yogyakarta**ABSTRACT**

**Introduction:** Ramsay Hunt Syndrome is a rare and severe complication of varicella-zoster virus reactivation. It is characterized by vesicles in the auditory canal, otalgia, and ipsilateral facial paralysis. If not treated properly, the likelihood of full recovery is as low as 20%. Early initiation of steroid and antiviral therapy within 72 hours can improve the prognosis. We report a rare case of Ramsay Hunt Syndrome that occurred 20 days after the rash eruption.

**Case Report:** A 56-year-old male was referred to our clinic due to painful herpetic neuralgia and facial nerve palsy. He initially experienced burning pain on the right side of his face, which was followed by the appearance of an erythematous, vesicular rash on his forehead and ear. Physical examination revealed a similar vesicular rash along the auricle and external auditory canal. By day 24, the patient awoke with partial right-sided facial paralysis and was subsequently referred to the neurology clinic. Based on clinical findings, a diagnosis of Ramsay Hunt Syndrome was made.

**Discussion:** Ramsay Hunt Syndrome arises from the reactivation of the dormant varicella-zoster virus. Following primary varicella-zoster virus infection, the virus may remain latent in the sensory dorsal root ganglia. Reactivation results in shingles characterized by an ipsilateral vesicular eruption confined to a dermatomal distribution.

**Conclusion:** We report a rare case of Ramsay Hunt Syndrome, a severe complication of varicella-zoster virus reactivation. Early recognition and treatment are crucial to improve the prognosis of this condition.

**Keywords:** neuralgia; facial palsy; ramsay hunt syndrome; varicella-zoster

**INTRODUCTION**

Ramsay Hunt Syndrome, also known as Herpes Zoster Oticus, is a rare and severe complication of varicella-zoster virus reactivation. It is characterized by the presence of vesicles in the auditory canal, otalgia, and ipsilateral facial paralysis. If not treated properly, the likelihood of full recovery occurs in as low as 20% of cases. Early treatment with steroids

and antivirals initiated within 72 hours significantly improves the prognosis.

We report a rare case of Ramsay Hunt Syndrome that occurred 20 days after the rash eruption. Previous studies have shown that the risk of Ramsay Hunt Syndrome after varicella-zoster reactivation is as low as 0.2% by day 60. The long-term morbidity associated with facial palsy and pain

highlights the importance of discussing this topic further.

### **CASE REPORT**

We report a rare case of a 56-year-old male who was referred due to painful herpetic neuralgia and facial nerve palsy. The patient initially developed burning pain on the right side of his face, followed by the appearance of an erythematous, vesicular rash on the forehead and ear. Over days 5–10, the patient experienced a right earache and headache, and the rash spread to the neck, halting at the midline of the face. He was diagnosed with herpes zoster and treated with valacyclovir, prednisone, and acetaminophen for 10 days.

On day 14, the patient returned to his family physician with persistent right ear discomfort, severe burning pain, and hearing loss. Examination revealed a similar rash along the

auricle and the external auditory canal. Low-dose amitriptyline was prescribed for herpetic neuralgia, which slightly pain relief. The lesions began to improve.

On day 24, the patient woke up with partial right-sided facial paralysis and was referred to the neurology clinic. At the neurology clinic, Ramsay Hunt Syndrome was diagnosed. The patient had severe allodynia and facial pain. Methylprednisolone was reintroduced for 5 days, and gabapentin 300 mg daily was prescribed for the neuralgia, leading to significant pain relief.

After rehabilitation and medical treatment, the patient's condition partially improved. He was followed up for 2 months, during which the pain completely resolved, but the facial palsy did not fully recover.

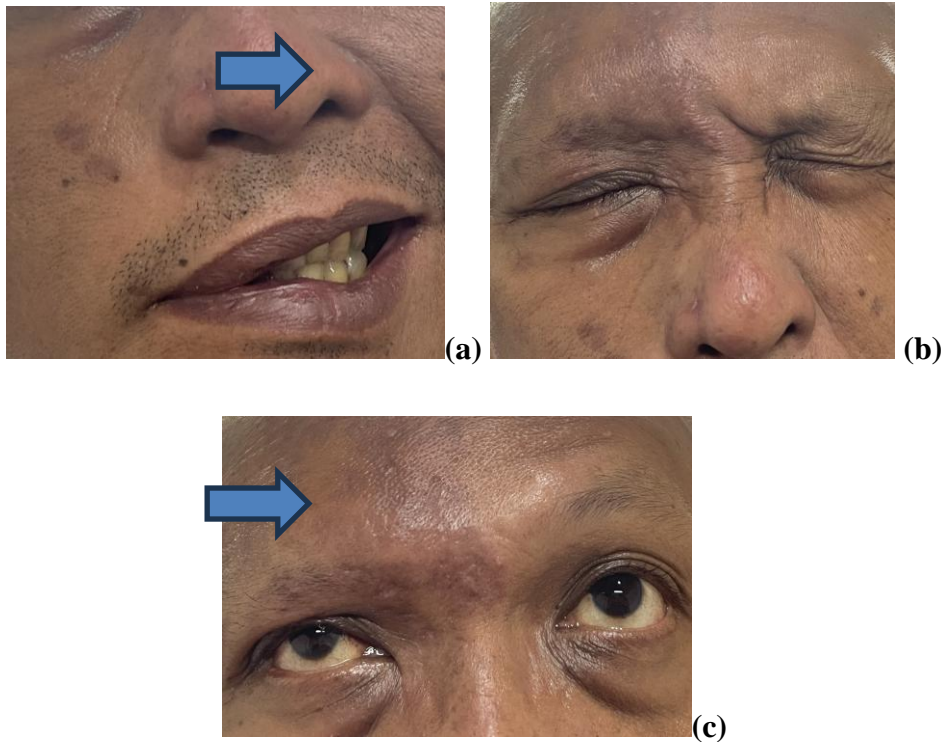


Figure 1. Right-sided facial nerve palsy with healing rash indicated by the arrow.

## DISCUSSION

We report a rare case of Ramsay Hunt Syndrome, which occurs in only 0.2% of all Herpes Zoster cases. The syndrome results from the reactivation of dormant varicella-zoster virus. After the primary varicella infection, the virus may remain latent in the sensory dorsal root ganglia. Reactivation leads to shingles, characterized by an ipsilateral vesicular eruption limited to a dermatomal distribution. Neuropathic pain can precede or follow the appearance of vesicles. In Ramsay Hunt Syndrome, reactivation occurs in the geniculate ganglion,

causing ipsilateral peripheral facial nerve palsy, otalgia, and auricular vesicles.

In our case, the patient presented three weeks after the initial skin eruption. The diagnosis of Ramsay Hunt Syndrome was based solely on clinical symptoms and signs, specifically unilateral facial weakness accompanied by vesicular lesions in the ipsilateral ear, hard palate, or anterior two-thirds of the tongue. The facial palsy was identified by facial drooping, a widened palpebral fissure, and a decreased smile on the affected side (Figure 1).

In our case, the patient was referred due to neuropathic pain. This pain is often described as burning, itching, dull, and aching and is sometimes accompanied by allodynia. Otagia completes the classic triad of Ramsay Hunt Syndrome. Imaging studies, such as brain CT or MRI, and cerebrospinal fluid (CSF) analysis do not provide additional diagnostic value for this condition.

The patient had been started on antiviral and steroid therapy early by the family physician. The pharmacologic management of Herpes Zoster complicated by Ramsay Hunt Syndrome is not yet fully established. Previous reviews have shown that acyclovir or valacyclovir may reduce the duration of acute Herpes Zoster symptoms and associated long-term nerve damage. The anti-inflammatory effect of steroids in Ramsay Hunt Syndrome is believed to reduce edema of the facial nerve, although no randomized controlled trials have specifically investigated their use in this condition. In this case, the patient was treated with a combination of antiviral and steroid therapy. Previous meta-analyses have concluded that

the combination of antiviral therapy and steroids significantly improves facial nerve recovery compared to steroids alone.

Adjunctive treatments include eye patches, taping the eye closed, artificial tears, and oral analgesics. In this case, the presence of severe herpetic neuralgia and allodynia was alleviated with gabapentin. Previous reviews have shown that gabapentin significantly reduces pain in post-herpetic neuralgia, with a higher proportion of responders (patients achieving a  $\geq 50\%$  reduction in mean daily pain score) compared to placebo.

## CONCLUSION

We present a rare case of Ramsay Hunt Syndrome, a severe and uncommon complication of varicella-zoster virus reactivation. This case underscores the importance of early recognition and timely intervention with antiviral and corticosteroid therapy to improve facial nerve recovery and reduce complications. Further research is needed to optimize treatment protocols and enhance outcomes for patients with this condition.

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