



# Herpes Zoster of the trigemus nervo as a differential diagnosis of Ramsay Hunt Syndrome – Case Report

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## ABSTRACT

The varicella zoster virus can affect several segments, causing pain and zosteriform skin involvement. Its diagnosis is clinical and treatment is carried out with antivirals. Ramsay Hunt Syndrome is the involvement of the facial nerve by the varicella zoster virus, with clinical presentation of peripheral facial paralysis, vesicular lesions in the auditory pavilion and ipsilateral otalgia. Male, 83, was admitted to the emergency room due to rhyme deviation that started 2 days ago with pain in the mandibular and auricular region on the left associated with dysarthria.

**Keywords:** Dysarthria, Varicella virus, Antivirals.

## 1 INTRODUCTION

The varicella zoster virus can affect several segments, causing pain and zosteriform skin involvement. Its diagnosis is clinical and treatment is carried out with antivirals. Ramsay Hunt Syndrome is the involvement of the facial nerve by the varicella zoster virus, with clinical presentation of peripheral facial paralysis, vesicular lesions in the auditory pavilion and ipsilateral otalgia. Physical examination should be thorough for the diagnostic definition, since the involvement of the trigeminal nerve by the virus can generate identical skin lesions, similar topography, and perilesional edema that simulates facial paralysis.

## 2 CASE REPORT

Male, 83, was admitted to the emergency room due to rhyme deviation that started 2 days ago with pain in the mandibular and auricular region on the left associated with dysarthria.

Has a personal history of atopic dermatitis and hypertension on daily use of losartan 50 mg twice daily. She denied other comorbidities, alcoholism, smoking and allergies.

On physical examination, the patient had Glasgow 15, left rhyme deviation, dysarthria, preserved muscle strength in all four limbs, and preserved memory. Otoscopy shows an integrated and translucent tympanic membrane without alteration of the internal auditory canal bilaterally. Dermatological



examination revealed an erythematous plaque with vesicobullous lesions on the lower lip, chin region, mandibular and left pinna. There was also an increase in the volume of the lower third of the face with lip edema. The lesions did not exceed the midline of the face. (Figures 1 and 2).

Figure 1: Vesicobullous lesions on the lower lip, chin and mandibular region on the left, which do not exceed the midline of the face, associated with an increase in volume of the lower third of the face, with lip edema. Deviation of the rhyme is observed ipsilateral to the lesions.



Figure 2: Presence of vesicles in the left pinna.





Laboratory tests were performed at the unit, which showed anemia (Hb 10.9), leukocytosis (14650) and platelet disease (456 thousand). No changes in kidney function or electrolytes. After being diagnosed with Herpes Zoster with trigeminal nerve involvement, treatment was started with acyclovir 800 mg 5x a day for 10 days, cephalexin 500 mg 4x a day for 7 days, prednisolone 40 mg in the morning, in addition to dipyrone and paracetamol associated with codeine if necessary.

The patient returned on the eighth day of treatment, with significant improvement in the clinical picture and pain complaints, presenting at the physical examination glasgow 15, with no rhyme deviation, memory, speech and language preserved.

Dermatological examination revealed residual crusted lesions in the left pinna, mandibular and chin pavilions, with significant regression of edema in the lower third of the face. (Figures 3 and 4)

Figure 3: Residual crusted lesions in the lower lip, mandibular and chin region on the left, with regression of edema in the lower third of the face.



Figure 4: Residual crusted lesions in the left pinna.



### 3 DISCUSSION

Herpes zoster is a benign, self-limiting disease caused by the reactivation of the varicella zoster virus or herpes virus type 3. The clinical picture is characterized by the presence of skin lesions, neuralgic pain, paresthesia and pruritus. Dermatologically, it is characterized by erythema with clustered vesicles and/or blisters on an erythematous base confined to the affected nerve pathway, progressing to the formation of hematic crusts and tends to have involution of the condition within 4 weeks, which may leave hyperchromia or scars. The involvement is unilateral and does not exceed the midline.

The diagnosis, in most cases, is eminently clinical and epidemiological, and early diagnosis is of paramount importance in order to avoid serious sequelae.

When the virus affects the facial nerve, we characterize Ramsay Hunt syndrome. Ramsay Hunt syndrome is defined as ipsilateral peripheral facial paralysis, accompanied by an erythematous and vesicular rash in the pinna or mouth, due to involvement of the geniculate ganglion of the seventh cranial nerve. Difficulty in speech, reduced flow of secretions such as saliva and tears, as well as otalgia, tinnitus, vertigo, and hearing loss may occur.

Trigeminal nerve involvement occurs in 15% of herpes zoster cases (3), with the ophthalmic branch (V1) being the most affected. Frequently, when the infestation affects the maxillary branch (V2) and mandibular branch (V3), vesiculobullous lesions in the oral cavity are observed, as in our case. Herpes zoster of the trigeminal nerve can induce the appearance of characteristic lesions along the entire nerve



pathway, in addition to pain and local edema. In the present case, we have a patient with herpetic lesions, but it was not characterized as Ramsay Hunt syndrome due to the absence of facial paralysis, presenting only deviation of the rhyme due to the important perilesional edema, thus the herpes zoster of the trigeminal nerve being a major differential diagnosis of Ramsay Hunt Syndrome.



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