

# An unexpected case of Ramsay Hunt Syndrome in a 21 years old female: A case report.

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**Abstract**— A 21 years old female came to the hospital complaining of sudden left unilateral facial paralysis. After 2 months of different hospitals course, the patient was diagnosed with Ramsay Hunt Syndrome: Which is an acute peripheral facial neuropathy associated with erythematous vesicular rash of the skin of the ear canal, auricle and/or mucous membrane of the oropharynx [1].

**Index Terms**— Bell's Palsy, Herpes Zoster Oticus, Ramsay Hunt Syndrome, unilateral facial paralysis, Varicella Zoster,

## 1 INTRODUCTION

In 1907, James Ramsay Hunt described the clinical syndrome-Ramsay Hunt Syndrome that carries

his name [2], which is caused by reactivation of Varicella Zoster virus in the geniculate ganglion [3]. The classic triad of Ramsay Hunt Syndrome consists of ipsilateral facial paralysis, otalgia, and vesicles in the auditory canal [4]. Hunt described two kinds of the syndrome: an otalgic type which is characterized by ear pains, and a prosopalgic type which is characterized by facial pain [5]. Facial palsy is accompanied by changes in taste, and a decrease in salivation as well as tears production. Without treatment, full recovery of facial paralysis can occur as little as 20% of cases; this is much improved if treatment is started within 72 hours [6]. However, the similarity between Bell's palsy and Ramsay Hunt Syndrome presentations makes this an important topic of discussion.

The aim of this article is to inform both physicians and the reader about the presentation of this syndrome, including both typical and atypical, investigations and proper management of Ramsay Hunt Syndrome in order to get better outcome. Noting that Ramsay Hunt syndrome can also occur in the absence of a skin rash.

## 2 CASE REPORT

A 21 years old female presented to the ER with sudden unilateral facial paralysis on the left side of the face. The patient was diagnosed with Bell's palsy based on the history and physical examination, and was prescribed corticosteroids and physiotherapy. After 1 month of treatment the patient came to the hospital complaining of no improvement, the patient was reassured by the physician. Two weeks later the patient went to another hospital complaining of left ear pain and no improvement. The patient was immediately referred to ENT clinic. After taking full history, and on left ear examination, there were multiple bullae blisters on the Eustachian tube. Then the patient was diagnosed with Ramsay Hunt Syndrome, and was prescribed acyclovir and ear drops.

## 3 DISCUSSION

### 3.1 Pathogenesis

The pathogenesis of Ramsay Hunt Syndrome involves the reactivation of latent Varicella Zoster virus in the geniculate ganglion of the facial nerve [7]. About 12% of all the peripheral facial nerve palsies are caused by Varicella Zoster virus [8].

### 3.2 Diagnosis

Diagnosis of the syndrome is purely clinical. However, there are some symptoms that are pathognomonic to Ramsay Hunt Syndrome such, peripheral facial nerve palsy and vesicular rash on the external ear and/or the mucosa of the ipsilateral part of the palate or tongue. In some cases a blood test for virus antibodies could be helpful.

### 3.3 The difference

Both Bell's palsy and Ramsay Hunt syndrome presents as a facial paralysis, the physician can differentiate between them by thinking of special criteria of each disease, Bell's palsy presents as facial paralysis without a rash. Patients with Ramsay Hunt Syndrome usually presents with very severe paralysis at the time of the onset and also least likely to recover completely [9]. Some studies suggest that the treatment with corticosteroids such as prednisone and antiviral drugs may give better outcome [9].

## 4 CONCLUSION

Ramsay Hunt syndrome could present in a variable clinical pictures, depending on the pairs of nerves involved and their number. It is caused by a reactivation of a previous infection of Varicella Zoster virus, which remained latent in the geniculate ganglion. Proper diagnosis and management of this case along with follow up will improve the recovery of these patients.

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