



Ramsay Hunt Syndrome

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Ramsay Hunt syndrome is triad classic symptoms from vesicles in the auricles, otalgia and facial paralysis / weakness. This disease is result of reactivation of the Varicella Zoster Virus (VZV) and is more common in immunocompromised persons as complications of Herpes Zoster. The use of antivirals and steroids is still the main choice as the main line of therapy to treat the patient and to have better outcome.

Keywords: Ramsay Hunt syndrome, Varicella Zoster Virus, immunocompromised

Introduction

Varicella Zoster Virus (VZV) resides in ganglion with varying time variations even when someone already feel fully heal, it can be still reactivate. Reactivation time is often associated with immune system of people who have experienced primary infection from this virus (as we know as shingles).^{1,2} When reactivation happens, the person will sick a second time in the form of herpes zoster.³ The immunocompromised person may experience complications from

herpes zoster which is called Ramsay Hunt Syndrome which is a collection of three symptoms (vesicles in the auricle, otalgia and facial paralysis / weakness).⁴

The disease was first discovered in 1907 by J. Ramsay Hunt.¹ Actually very rare. In the world, this disease affects only 5 in 100,000 people, affects more women and very rarely affects children under 6 years of age.⁶ The severity is often related to the patient's immune status.⁷

Similar to other viral diseases, Ramsay Hunt is actually a self-limiting disease.⁸ However, combined antiviral and steroid administration is often associated with the prevention of complications and prolonged side effects of this disease.⁹

Pathophysiology

This disease is caused by the Varicella Zoster Virus (VZV) which causes smallpox or shingles when person get first infected.¹⁰ The varicella zoster virus is transmitted through droplets and into the respiratory tract and causes symptoms such as fever, sore throat, weakness and the most characteristic is the appearance of vesicles throughout the body.¹¹

After recovering from primary infection, this virus does not disappear immediately.¹² It resides in the ganglia and will reactivate if the immune system decreases and causes the disease which we know as Herpes Zoster. This also causes shingles to spread according to the

dermatome area. The severity of herpes zoster is influenced by the level of immunity of the patient. In immunocompromised patients, herpes zoster may present with the Ramsay Hunt Syndrome.^{1,2}

The risk factors for Ramsay Hunt Syndrome are largely associated with the patient's immune system, which is influenced by age (over 60 years), immunocompromised disease, metabolic disease (diabetes mellitus), and others.⁶

Symptoms

When virus reactivated, the body will experience inflammation, edema, and compression of the VII cranial nerves. This causes symptoms of vesicles in the ear area, otalgia and weakness on one side of the face. The vesicles that appear are characteristic of redness, pain, and are located in the pinna area and can spread to the area around the mouth.¹³

Ramsay hunt patient often appear with face paralyssys more severe than Bell's palsy. Although Bell's palsy patient predicted has same cause with Ramsay Hunt.¹⁴

Additional symptoms that can be felt by the patient include nausea, vomiting, weakness, dizziness and some rare cases, dry mouth and eyes which is caused by N VII paralysis.²

Complications and Prognosis

Patients without adequate treatment and a immunocompromised can experience sequelae for months or even permanently. The symptoms most often experienced by patients are postherpetic neuralgia, damage to the organs of vision and hearing. The severity of sequale often related to how soon the disease get treated and the administration of the antivrial although the absence of the data.¹⁵



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