



HERPES ZOSTER OTICUS – A RARE CASE REPORT

ENT

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ABSTRACT

Herpes zoster oticus also known as Ramsay hunt syndrome is one of the well known complication of varicella-zoster virus infection resulting in inflammation of the geniculate ganglion of cranial nerve 7. Basically it is a clinically proven diagnosis and classically expressed as ipsilateral facial paralysis, otalgia, and vesicles near the pinna, concha and external auditory canal. It is rare in children and often affects both sexes equally. The occurrence rate of associated cranial polyneuropathy has been reported to be 1.8% - 3.2% and cranial nerves 7,8,9 and 10 are most commonly affected. Herein, we delineate a case report of year-old man suffering from ramsay hunt syndrome along with facial nerve palsy treated effectively with rehabilitation program, after the termination of the combination therapy of antivirals and steroids.

KEYWORDS

VESICLES, HERPES ZOSTER, RAMSAY HUNT, FACIAL PARALYSIS

INTRODUCTION

Herpes zoster oticus also known as Ramsay hunt syndrome is named after an American neurologist James Ramsay Hunt¹. Its caused due to varicella – zoster virus (VZV), a member of the human herpesvirus family. Primary infection to varicella zoster virus produces a typical picture of chickenpox and once its cleared the virus remains latent in cranial nerves (usually facial and vestibulocochlear nerve) or dorsal root ganglion and subsequently reactivate in immunocompromised patients leading to either shingles or ramsay hunt syndrome. The classical triad with which the patient presents is ipsilateral facial paralysis, otalgia and erythematous vesicular lesions near the pinna, concha and the external auditory canal which manifests as a clinically proven diagnosis². We, herein present a case of a 78 year-old man suffering from Herpes zoster oticus along with facial nerve palsy. A combination therapy of antivirals and steroids were employed to the patient after which he recovered successfully.

Case Report

A 78 year old male came to ENT OPD with chief complaints of vesicular rashes along right auricle and partial right sided facial asymmetry since 2 days. Patient also complained of right sided ear ache, hearing loss and vertigo. The patient also had vesicles over the right neck C2 – C4 dermatomes since 10 days.

The patient was apparently asymptomatic 10 days back when he developed erythematous vesicular rashes over right side of neck along dermatome level C2 – C4. The rash was confined to right side and did not cross the midline. It was tender, warm and blanched when palpated. The patient consulted dermatology OPD and was started on valacyclovir and Pregabalin. 7 days after eruption of neck vesicles patient visited ENT OPD with a similar vesicular rash along the auricle. Examination of External auditory canal revealed a vesicle in the anterior part of meatus too, however the tympanic membrane was intact and normal. Patient also had right sided facial paralysis with loss of wrinkling and incomplete closure of eye ball on right side. He complained of occasional vertigo and audiometry revealed bilateral mild sloping sensorineural hearing loss. There was no significant past history of Diabetes, hypertension and asthma.

Based on the typical clinical findings a diagnosis of Ramsay Hunt syndrome was established. Valacyclovir, Pregabalin, Prednisolone and Topical ear drops were started. Patient was followed up after 1 month.

After 1 month the vesicles had subsided and crusts remained. External auditory canal and tympanic membrane examination was normal. Facial asymmetry completely disappeared and patient did not have any episodes of vertigo since 15 days.

DISCUSSION

James Ramsay proposed following three syndromes :

- Type 1- Dyssnergia Cerebellaris Progressiva, a rare, degenerative, neurological disorder characterized by intentional tremors, myoclonus epilepsy, cognitive impairment and progressive ataxia.
- Type 2- Herpes Zoster Oticus, a disorder caused by the reactivation of pre-existing Varicella zoster virus in the geniculate ganglion of the facial nerve.
- Type 3- Hunt's disease or Artisan's palsy, an occupationally induced neuropathy of the deep palmar branch of the ulnar nerve⁴.

We delineated about the Ramsay hunt syndrome type 2 i.e. Herpes zoster oticus. It affects both immunocompetent and immunocompromised patients and has an incidence of about 5 per 100000 individuals per year⁵.

Herpes zoster oticus is characterized by erythematous vesicular eruptions on the auricle and is associated with severe ear pain and ipsilateral peripheral facial paralysis.

It is caused by reactivation of latent Varicella zoster virus in the geniculate ganglion⁶. After activation, the virus travels along the sensory branches of the facial nerve and also causes inflammation of adjacent motor branches of the facial nerve leading to facial paralysis. At times the eighth cranial nerve can be affected by varicella zoster virus causing vestibulocochlear symptoms⁷. Thus along with skin rashes, patients can also come with hearing loss, tinnitus, vertigo, nystagmus, nausea and vomiting.

The facial paralysis resulting from Ramsay Hunt syndrome has a worse prognosis than that seen in Bell's palsy with only 70% regaining normal or near normal facial function compared with over 90% in Bell's palsy⁸.

Hence early diagnosis is a crucial factor to improve nerve damage in herpes zoster oticus. Diagnosis is mainly clinical, based on accurate history, clinical examination and neurological examination.

In the current case, the skin lesions which were confined to the right pinna with associated LMN type of right facial palsy was the key to the diagnosis of Ramsay Hunt syndrome type 2.

The approved treatment for the present case includes anti-viral therapy with oral acyclovir or valacyclovir⁹. Oral prednisolone should also be started for speedy recovery. In comparison with Bells palsy, herpes zoster oticus seems to have a more severe paralysis early on and has less chances to recover completely¹⁰. Hence early diagnosis and

treatment of herpes zoster oticus is of paramount importance as prognosis of cranial nerve damage depends on the time when combination therapy with antiviral and steroid is started.

CONCLUSION

Herpes zoster oticus is a medical emergency and requires early diagnosis and treatment. In initial stages it has got a very good prognosis. Otolaryngological examination and audiometry should be done in all patients coming with facial nerve paralysis. Treatment given is a combination of antiviral agents and steroids. Early treatment can give remarkable results and complete recovery.

Images With Legends



**HERPES ZOSTER OTICUS -VESICLES
OVER PINNA AND NECK**



RIGHT SIDED FACIAL NERVE PARALYSIS

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