IJMPR 2023, 7(7), 75-77

International Journal of Modern Pharmaceutical Research
www.ijmpronline.com

ISSN: 2319-5878
IJMPR
Case Study
SJIF Impact Factor: 5.273

A CASE REPORT ON RAMSAY HUNT SYNDROME PRESENTING WITH CO-INFECTION OF H PYLORI.

Sidharth P. S.[1], Aparnna B. Asokan[1], Dr. Amal[2]* and Prof. Dr. Shaiju S. Dharan[3]

[1]Pharm D Intern, Department of Pharmacy Practice, Ezhuthachan College of Pharmaceutical Sciences, Marayamuttom, Thiruvananthapuram, Kerala, India.
[2]Assistant Professor, Department of Pharmacy Practice, Ezhuthachan College of Pharmaceutical Sciences, Marayamuttom, Thiruvananthapuram, Kerala, India.
[3]Principal/HOD, Department of Pharmacy Practice, Ezhuthachan College of Pharmaceutical Sciences, Marayamuttom, Thiruvananthapuram, Kerala, India.

Received on: 04/05/2023
Revised on: 25/05/2023
Accepted on: 14/06/2023

***Corresponding Author**
Dr. Amal
Assistant Professor, Department of Pharmacy Practice, Ezhuthachan College of Pharmaceutical Sciences, Marayamuttom, Thiruvananthapuram, Kerala, India.

ABSTRACT

Ramsay Hunt Syndrome (RHS) is a rare condition, which occurs as a severe complication of varicella-zoster virus (VZV) reactivation in the geniculate ganglion. It is mainly characterized by facial nerve paralysis with an erythematous vesicular rash on the ear and ipsilateral anterior two third of the tongue and soft palate. Ramsay Hunt Syndrome is still mostly diagnosed by the patient's history and neurological examination. Diagnosis of Ramsay Hunt Syndrome is done by clinical examination, which is based on the unilateral facial paralysis, and vesicular lesions in the ipsilateral ear, hard palate, or anterior ⅔ of the tongue. The final component of the RHS is either otalgia or vertigo. Various complications like post-herpetic neuralgia, secondary infection with bacteria, corneal ulcers, hearing loss, and permanent facial paralysis can occur. The main stay of treatment includes antivirals with corticosteroid agents. It has been demonstrated that acyclovir, valacyclovir, and famciclovir shorten the duration of acute Herpes Zoster symptoms and the resulting long-term damage. As adjuvant therapy, RHS is also managed with the use of eye patches, taping the eyes shut, artificial tears, and oral analgesics. In patients with Herpes Zoster symptoms, a strong index of suspicion and diligent follow-up are necessary. Early use of corticosteroids and antivirals has been demonstrated to drastically enhance patient outcomes. Helicobacter Pylori (H.Pylori) infection, is one of the common bacterial infections which is isolated from the oral cavity, dental plaques, and saliva.

KEYWORDS: H pylori, Pangastritis, Herpes-Zoster virus.

INTRODUCTION

The Ramsay Hunt Syndrome (RHS) was first described by James Ramsay Hunt in 1907. Ramsay Hunt Syndrome is an uncommon condition occurring by the reactivation of latent herpes zoster virus in the geniculate region.[1] Clinical representations include unilateral vesicular rash, peripheral facial nerve palsy, and infection of the geniculate ganglion with the involvement of the external ear and oral mucosa. It also causes a vesicular rash on the ear (zoster oticus).

Varicella Zoster Virus (VZV) infection usually started as a primary infection known as chicken pox or varicella. VZV remains latent in neurons of the cranial nerves and dorsal ganglia even after chickenpox subsides. Localized vesicular rashes are seen when this latent VZV reactivation occurs subsequently.[2] Infection or reactivation of the VZV occurs in the geniculate ganglion in the facial nerve which results in facial paralysis, and within the temporal bone. Also decreased specific cell-mediated immunity for VZV can also cause the reactivation of the virus.[3] Facial paralysis is one of the main features which without treatment only recovers fully in less than 20% of the cases. Treatment within 72 hours can result in much improvement in these clinical features.

Diagnosis of Ramsay Hunt Syndrome is usually done by clinical examination, which is based on the unilateral facial paralysis, and vesicular lesions in the ipsilateral ear, hard palate, or anterior ⅔ of the tongue. The pain associated is dull and there is also allodynia. The final component of the RHS is either otalgia or vertigo. Various complications like post-herpetic neuralgia, secondary infection with bacteria, corneal ulcers, hearing loss, and permanent facial paralysis can occur.[4] At this time, corticosteroids and antivirals are the mainstay of treatment. It has been demonstrated that acyclovir, valacyclovir, and famciclovir shorten the duration of acute Herpes Zoster symptoms and the resulting long-term damage.[5] The Food and drug administration

(FDA) has authorized these medications as the first-line treatments for Herpes Zoster because they are well tolerated.[6]

Helicobacter Pylori (H.Pylori) is a gram-negative bacterium that can infect humans. It usually occurs in the stomach of infected individuals causing inflammation and ulcer. H.Pylori is the most common cause of peptic ulcer, gastric lymphoma, atrophic gastritis, and gastric carcinoma. Transmission of H.Pylori usually occurs via the fecal-oral, gastric-oral, oral-oral, or sexual routes. Triple therapy and Sequential therapy are the mainstays of treatment for people infected with H.Pylori infection.[7]

CASE REPORT

A 61-year-old male patient presented with complaints of swelling and boils in the left ear following a fever for 1-week, severe headache, and ear discharge for 6 days. He also had an inability to swallow and was treated for Herpes Zoster for 2 days. He had a medical history of systemic hypertension and Type II Diabetes Mellitus on medical management with Tablet Telmisartan 40mg and Tablet Metformin 500mg. On admission, the patient had a Blood pressure of 160/100 mm Hg and a respiratory rate of 24 beats/min. On physical examination, the patient was conscious, nasal phonation +, husky voice +, nasal regurgitation +. Facial palsy is present on the left side. Laboratory data revealed elevated Erythrocyte sedimentation rate (ESR), C-Reactive protein (CRP), and Urea levels. The endoscopy report findings showed impressions of hiatus hernia, pangastritis, and Duodenitis D1. Rapid Urease Test was positive.

The patient has managed with an Injection of Acyclovir 250 mg, an Injection of Cefoperazone Sulbactam 1.5g, an Injection of Ondansetron 8mg, an Inj pantoprazole 80 mg, an Injection of Levosulpiride 25mg, and own medications (Tablet Telmisartan 40mg and Tablet Metformin 500mg) for Blood pressure and diabetes was continued during the hospital stay. The patient was symptomatically better and was discharged after 6 days. Oral Antiviral Tablet Acyclovir 800mg, Tablet Pantoprazole 40 mg, Tablet Telmisartan 40 mg, Tablet Lesuride 25mg, and Multivitamin supplement along with own medications were given as discharge medication until the next OP visit.

DISCUSSION

Ramsay Hunt Syndrome is an uncommon disease characterized by vesicular rashes on the external ear and severe pain. Diagnosis is usually made by clinical findings, neurological examination, and history.[8] In this case, the patient initially presented with difficulty in swallowing and regurgitation of food and water, rashes on one side face, and discharge from the ear. The rashes and discharge from the ear make a suspicion of Herpes Zoster affecting the ears. This patient also has facial nerve paralysis. Therefore, the symptoms of regurgitation were initially considered to be caused by the Herpes-Zoster infection. When symptoms show a failure to improve after starting treatment we have opted for an endoscopy which revealed pangastritis with H pylori infection. This is a case with co-infection of Herpes Zoster and H Pylori. Proper investigation is to be done to rule out the co-infection with other pathogens if atypical symptoms like those portrayed in this case are observed. The mainstay of treatment for RHS is the combination of antiviral medications and steroids. It has been demonstrated that acyclovir, valacyclovir, and famciclovir shorten the duration of acute Herpes Zoster symptoms and the resulting long-term damage. In Ryu's Study, 155 individuals with Bell's palsy and 202 RHS patients were compared. Antiviral medications and oral steroids were given to both groups. Ryu concluded that RHS had a worse prognosis for recovering from facial paralysis than Bell's Palsy.[9] Murakami's study examined the significance of receiving treatment promptly and found that how quickly the therapy is begun, the better the prognosis for recovery. Because the prognosis of cranial nerve injury relies on the period at which acyclovir-corticosteroid therapy is initiated, early identification of Ramsay Hunt Syndrome is therefore essential.[10] The recommended treatment for RHS is a combination of antiviral agents and steroids. A meta-analysis of 12 RHS patients showed that the recovery of facial nerve palsy was considerably enhanced by antiviral medications in comparison to steroids alone.[11]

CONCLUSION

Ramsay Hunt Syndrome is a rare disorder but it can be easily diagnosed by clinical examination and history along with neurological examinations. Early diagnosis and treatment are crucial in the case of RHS, therefore the time at which the treatment with antiviral and steroids is essential for determining the extent of cranial nerve damage. In patients with Herpes Zoster symptoms, close monitoring and follow-up is essential and earlier treatment have shown to significantly improve the outcomes in patients with RHS.

FINANCIAL SUPPORT AND SPONSORSHIP

Nil.

CONFLICTS OF INTEREST

The authors have the required patient consent form, on which the patients have agreed to participate in the study and be represented in the corresponding publication.

REFERENCE

1. Worme M, Chada R, Lavallee L. An unexpected case of Ramsay Hunt syndrome: case report and literature review. BMC research notes, 2013 Dec; 6: 1-5.
2. Kansu L, Yilmaz I. Herpes zoster oticus (Ramsay Hunt syndrome) in children: case report and literature review. International Journal of pediatric otorhinolaryngology, 2012 Jun 1; 76(6): 772-6.

3. Lee SG, Yeo SI, Goh JS, Min BW. Ramsay Hunt Syndrome: Case report on two cases. Journal of the Korean Pain Society, 1992 Nov 1; 5(2): 263-8.
4. Sweeney CJ, Gilden DH. Ramsay hunt syndrome. Journal of Neurology, Neurosurgery & Psychiatry, 2001 Aug 1; 71(2): 149-54.
5. Ji Y, Ma GM, Kang ZL, Zhang Y, Han JZ, Li J, Wu DD, Wang J. Ramsay Hunt syndrome with pontine lesion: A case report. Medicine, 2019 Feb; 98(5).
6. Derin S, Derin H, Sahan M, Çaksen H. A pediatric case of Ramsay hunt syndrome. Case Reports in Otolaryngology, 2014 Sep 8; 2014.
7. Suerbaum S, Michetti P. Helicobacter pylori infection. New England Journal of Medicine, 2002 Oct 10; 347(15): 1175-86.
8. Wayman DM, Pham HN, Byl FM, Adour KK. Audiological manifestations of Ramsay Hunt syndrome. The Journal of Laryngology & Otology, 1990 Feb; 104(2): 104-8.
9. Ryu EW, Lee HY, Lee SY, Park MS, Yeo SG. Clinical manifestations and prognosis of patients with Ramsay Hunt syndrome. American Journal of Otolaryngology, 2012; 33(3): 313-318.
10. Murakami S, Hato N, Horiuchi J, Honda N, Gyo K, Yanagihara N. Treatment of Ramsay Hunt syndrome with acyclovir- prednisone: significance of early diagnosis and treatment. Annals of neurology, 1997 Mar; 41(3): 353-7.
11. de Ru JA, van Benthem PP. Combination therapy is preferable for patients with Ramsay hunt syndrome. *Otol Neurotol*, 2011; 32(5): 852–855. doi: 10.1097/MAO.0b013e31821a00e5.