Herpes Zoster Infection – A Case Report

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Abstract

Herpes zoster (HZ) or ‘shingles’ results from reactivation of the Varicella zoster virus (VZV). Primary VZV infections in sero negative individuals are known as varicella or chicken pox. Secondary or reactivated disease is known as shingles or herpes zoster. Early diagnosis and use of antiviral agents should be the mainstay of its management. This paper presents a case report of such an infection and its management.


Key words: Herpes zoster, Antiviral, shingles

Introduction

Varicella zoster is a ubiquitous DNA virus which belongs to subfamily of humen alpha herpes virus. Herpes zoster is an acute viral infection characterized by vesicular skin lesions which are usually distributed over several unilateral adjacent sensory dermatomes. It causes chicken pox and then remains latent for decades in cranial nerve, dorsal root and autonomic nervous system ganglia along the entire neural axis. The most frequent and debilitating complication of HZ is post herpetic neuralgia (PHN), which is a form of neuropathic pain that appears in the dermatomes affected by the VZV infection. Herpes zoster infection can be of various types. Herpes zoster ophthalmicus involves the orbit of the eye and occurs in approximately 10-25% of cases. It is caused by the virus reactivating in the ophthalmic division of the trigeminal nerve. In a few patients, symptoms may include conjunctivitis, keratitis, uveitis, and optic nerve palsies that can sometimes cause chronic ocular inflammation, loss of vision, and debilitating pain. Herpes zoster oticus, also known as Ramsay Hunt syndrome type II, involves the ear. It results from the virus spreading from the facial nerve to the vestibulocochlear nerve. Symptoms includes hearing loss and vertigo. Oral manifestations of herpes zoster appear when the mandibular and maxillary divisions of the trigeminal nerve are affected. Infection of maxillary branch produce vesicles on palate, uvula and the tonsils, while in case of involvement of mandibular division, the vesicles appears on buccal mucosa, floor of mouth, anterior part of tongue. Osseous and dermal manifestations such as devitalized teeth, internal resorption, abnormal development of

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permanent teeth, spontaneous exfoliation of teeth, necrosis of maxilla and mandible have been reported. The most commonly affected dermatomes are the thoracic (45%), cervical (23%) and trigeminal (15%). It is believed that HZ is caused by reactivation of the latent VZ virus which had been acquired during a previous attack of chicken pox. HZ is very common, especially in elderly. The annual incidence of HZ in population-based studies in several countries ranges from 1.2 to 3.4 cases per 1000 inhabitants/year. The lifetime risk of zoster is estimated to be 10-30% and increases markedly with age, occurring in up to 50% in people who live till 85 years of age. Young adults also suffer from HZ and its overall incidence is 215 per100,000 person/years.

Case Report

A 28 year old man reported in our institution with Chief complaint of swelling and pain with itching in left side of face since last 2 days. History revealed that the patient had fever and severe throat infection a week ago. Then he had burning sensation in left side of the face as well as oral cavity. Gradually vesicles appeared 4 days back and than those vesicles ruptured to form ulcers which are very painful. All the ulcers and vesicles were limited to the left side of face and oral cavity only (Fig. 1).

Medical history was non contributory except for the fact that patient suffered from chickenpox in the childhood.

On examination multiple grouped vesicles and few shallow ulcerations on lips and peri-oral skin on left side of face not crossing the midline.(Fig 2)

Intraoral examination showed multiple shallow ulcerations with erythematous irregular borders with tissue tags are seen on buccal mucosa, palate labial mucosa and anterior part of tongue on the left side(Fig 3). No dysphagia and odynophagia was reported. There were no skin lesions accompanying the oro-facial lesions.

Discussion

The diagnosis of HZ virus infection generally depends on the appearance of a characteristic cutaneous or mucocutaneous vesicular eruption. Lesions begin as erythematous macules and papules that quickly develop into vesicles. New lesions tend to form over a period of 3-5 days,
sometimes coalescing to form bullae. After they form vesicles, lesions progress through stages in which they rupture, release their contents, ulcerate, and finally crust over and become dry. Almost all adult patients experience pain (ie, acute neuritis) during the eruptive phase. A few experience severe pain without any evidence of a vesicular eruption (ie, zoster sine herpete), and a small number of patients have a characteristic eruption but do not experience pain. Symptoms and lesions in the eruptive phase tend to resolve over 10-15 days. However, lesions may require up to a month to completely heal, and the associated pain may become chronic.

Patients are infectious until the lesions have dried. Anyone who has not previously had varicella is at risk of acquiring this readily transmitted virus. Pregnant women and immunosuppressed patients have the highest risk of serious sequelae.

Therefore, early diagnosis and prompt treatment of the disease in the prodromal phase by the use of antiviral agents should probably be the mainstay of its management. Antiviral therapy has been shown to decrease the duration of HZ rash and the severity of pain associated with it.

**Conclusion**

Oral physicians should have a thorough knowledge about the presentation of this condition, its treatment and the possible complications. Differential diagnosis is very important to ensure that the correct treatment is performed.

**References**