



“HERPES ZOSTER – CASE REPORT”

Oral Medicine & Radiology

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ABSTRACT

Herpes zoster (HZ) commonly referred as shingles is reactivation of varicella zoster. Herpes zoster is usually seen in older age group whereas varicella zoster is seen in younger age group. Reactivation of varicella zoster from dorsal root of ganglion results in HZ. The clinical features include painful vesicular rash along the affected dermatome and pain may persist even after skin lesions heal. Complication of HZ are Post Herpetic Neuralgia, Ramsay hunt syndrome. Antiviral drugs are the main treatment of choice. We report a case of Herpes zoster in a 65-year-old female patient and highlights on clinical features complications and various treatment modalities.

KEYWORDS

Herpes zoster, vesicles, immunocompromised patients Running title- Herpes zoster

INTRODUCTION

Varicella zoster is DNA virus belonging to alpha herpesviridae causing primary and recurrent infection.^[1] Primary infection causes varicella zoster, the virus remains latent in dorsal ganglion when there is reactivation of the virus due to compromised immunity it produces herpes zoster which is also called shingles.^[2] Predisposing factors for reactivation of virus include age, stress, radiation therapy, immunocompromised patients who have undergone transplantation, patients on steroid therapy and HIV infection.^[3] The common clinical manifestation includes painful vesicular rash for a period of 4-5 weeks. Herpes Zoster can affect maxillary branch, mandibular branch or Ophthalmic branch of trigeminal nerve. Oral manifestations are seen when it affects maxillary and mandibular branch of trigeminal nerve.^[4] The purpose of this article is to emphasize on clinical features and management of HZ.

CASE HISTORY

A sixty five-year-old female patient reported to the Department of Oral Medicine and Radiology complaining of painful blisters over the left side of face since 3 days. The patient gave history of pain which was severe, continuous, radiating in nature and was associated with low-grade fever since 5 days. After 2 days, patient developed fluid-filled blisters over the left side of face. The blisters were initially small in size and few in number, later they increased in number by almost involving the entire left half of the face. The blisters were associated with watery discharge. [Figure 1]

Patient was unable to eat food and clean her oral cavity in the last 3 days. Medical, dental and family history was non-contributory. She had the habit of chewing areca nut in the form of gutkha for the past 10 years.

On general physical examination, the patient was found to be moderately built and nourished. No abnormality was detected with gait, nails, upper and lower limbs. No clinical signs of pallor, icterus, clubbing, cyanosis, edema and lymphadenopathy.

On assessment of vital signs, temperature was noted to be 99.2°F. On extra oral examination clusters of vesicles were seen on the left lower one-third of face, especially in the left perioral region with yellowish discharge. The skin was appearing swollen, shiny and the involved areas were very tender on palpation. On intraoral examination, left half of the lower lip was swollen, with few crusted areas. Multiple ulcers were seen on the left side of the palate.

The ulcers were irregular in shape measuring approximately 6 × 5 mm in size with erythematous margins and sloping edges. The floor of the ulcer showed yellowish white slough. The ulcers were tender on palpation. No induration was noted. [Figure 2] The oral hygiene status of the patient was poor and was having many periodontally compromised teeth.

Based on history, clinical findings, a provisional diagnosis of herpes zoster on left side of face involving 2nd branch of trigeminal nerve, chronic generalized periodontitis. Antiviral therapy was started with acyclovir 800 mg tablets 5 times per day for 14 days, Acyclofenac 3

times daily for 5 days and pantoprazole 400mg once daily in the morning before food. Bland diet was advised for the patient. The patient was reviewed after 1 week, there was regression in the number of extraoral and intraoral lesions with formation of scar tissue and hypopigmented area. No fresh vesicles were found.

DISCUSSION

HZ is commonly called as shingles derived from the latin word cingulum which means girdle. The common presentation of HZ includes unilateral rash that can wrap around the waist or torso like girdle. The incidence of HZ is 15 times higher in HIV patients and in general population has been reported as 5.4%.^[5] The clinical features begin with fever, headache, shooting pain burning and tenderness of the affected site. Clusters of vesicles appear unilaterally on an erythematous base along the course of affected branch.^[6] Similar findings were seen in our case also. The lesions start to dry and crustations occur after 3-5 days. It may take few weeks for the pigmented areas to return to appear normal. HZ is not contagious like varicella zoster. The V1 lesions occur on upper eyelid, forehead and scalp V2 lesions occur on midface and upper lip. There might be pain, burning and tenderness on the palate or gingiva affecting one side with clusters of vesicles or ulcers measuring 1 to 5mm and V3 lesions occur on lower face and lower lip, there will be ulcers on the tongue and mandibular gingiva.^[6,7]

Complications Of HZ are scarring of skin, keratitis, blindness, cranial and peripheral nerve palsies. Oral complication include root resorption, tooth exfoliation and alveolar osteonecrosis.

The pain may last for months to years even after healing skin lesions, this complication is known as Post herpetic Neuralgia. (PHN) When the geniculate ganglion is affected it may cause Ramsay hunt syndrome which include facial paralysis vesicular eruptions of external auditory meatus.^[8] Investigation include Polymerase chain reaction (PCR), Direct immunofluorescence, and viral culture. Tzanck test doesn't differentiate between herpes zoster and herpes simplex virus infection. PCR is sensitive and effective in detecting varicella zoster virus in fluids.

Medications for treatment include antivirals, TCAs (Tricyclic antidepressants), Analgesics and NSAIDs. Antiviral agents are the main treatment of choice for Herpes zoster. It is a self-limiting disease. Early administration of antiviral therapy lowers the illness of disease. It should be administered within 72 hours of eruption.^[9] Drugs like Acyclovir 800mg per day for 7 days Valacyclovir 1000mg 3 times for 7 days famciclovir 500mg for 7 days can be advised. Antiviral drugs stop the formation of new lesions. Side effects of acyclovir are gastrointestinal symptoms, myelosuppression and rash. The side effect of valacyclovir are similar to acyclovir.^[10] The use of corticosteroid is still controversial, it is contraindicated in immunocompromised patients. Tricyclic antidepressants can be prescribed for post herpetic neuralgia for a minimum period of 3 months to get good results. Capsaicin is also used for PHN which has effect on C fibre sensory neurons. These neurons release substance P which mediates neurogenic inflammation. Licorice is a traditional herb which has anti-inflammatory and antiviral property which is also used to treat herpes zoster infections.^[6]

Figures**Clusters of vesicles on left side of the face****Figure-1****Figure-2**

clusters of vesicles on lip (b) middle third of the face (c) unilateral ulcer on the left side of the face

CONCLUSION –

Through knowledge of the disease regarding the clinical features and diagnosis is important for treating the lesions which will benefit the patient. Antivirals are the the main drug of choice for treatment and has to be administered within 72 hours of the rash appearing. Complications arising from Herpes zoster should be kept in mind while treating the patients.

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