

## A Brief Study on Drug Usage Pattern in the Case Report of Herpes Zoster

**MS Simran Kousar\*, C Reshma and S Aravindh**

*Department of Pharmacy Practice, Santhiram College of Pharmacy, Nandyal, Andhra Pradesh, India*

**\*Corresponding Author:** MS Simran Kousar, Department of Pharmacy Practice, Santhiram College of Pharmacy, Nandyal, Andhra Pradesh, India.

**Received:** January 02, 2019; **Published:** February 13, 2020

### Abstract

Herpes zoster is the reactivated primary infection of varicella zoster virus. The virus stays in dorsal root (or) cranial nerve ganglia in dormancy. A typical dermatomal pain associated with vesicular rash in the reactivation. Usually one side of the torso and (or) one side of the face is affected with the rash. The cause of shingles is unclear but there is a high chance of occurrence in the immunocompromised individuals which is even more common in people with age greater than 60 years. The most common complications from shingles include postherpetic neuralgia, vision loss, neurological problems and skin infections. In the management antiviral therapy is included along with analgesic drug in severe pain which may be opioids, corticosteroids and NSAIDs (non-steroidal anti-inflammatory drugs). Aluminium acetate (or) calamine lotion is given as topical astringent to give a protective effect on rashes and inflamed skin.

**Keywords:** Torso; Dermatomal; Shingles; Dorsal Root Ganglia; Postherpetic Neuralgia

### Introduction

Herpes zoster results from reactivation of latent varicella zoster virus from root ganglia which is a sporadic disease. This is characterized with unilateral vesicular dermatomal eruption, generally associated with severe pain.

This occurs at all ages its incidence is more in the individuals with age greater than 60 years. Recurrent herpes zoster is rare, but in immunocompromised hosts there is high chance of occurrence.

Shingles are self-limited and generally resolve without management. The treatment given depends on the immunity of the host. NSAIDs, antivirals (acyclovir, valacyclovir) and aluminum acetate soaks for soothing and cleansing effect [1-5].

### Case Report and Discussion

A 55 years old female patient was presented with chief complaints of severe pain with erosions over side of the face, neck, chest and back since 10 days. The patient asymptomatic 15 days back after which she developed burning type of pain over the right side of the face, neck and upper chest followed by development of fluid filled lesions initially over right side of the neck, the lesions progressed to involve the upper chest, back, neck in the span of 10 days.

The patient consulted local RMP doctor as she was suffering from severe pain and giddiness, she was prescribed topical acyclovir and an intra venous infusion containing sodium and potassium as main electrolytes. Even though after this medications there was no improvement in the condition.

She consulted a dermatologist with chief complaints of multiple fluid filled lesions along with severe pain over the right side of the neck and chest. On examination erosions with crusting and erythema is present diffusely over the right side of the neck, face and chest. Whitish plaques were present over tongue, post inflammatory hypopigmentation and hyperpigmentation present over scapular area.

Past medical history revealed that she had an episode of at an age of 12 years. And she suffered with throat cancer (growth over pyriform fossa) one year back for which the patient undergone chemotherapy and radiotherapy for six months.

Patient became immunocompromised due to the chemotherapy and radiation therapy which was given for management of cancer. As she had episode of chicken pox (varicella). The varicella zoster which was in dormancy which got activated due to this weakening of immune system.

The physician advice for RBS (random blood sugar), electrolytes, RFT (renal function test), LFT (liver function test), complete blood picture (CBP), complete urine examination (CUE).

On clinical laboratory investigations her neutrophils were 77% which was high, lymphocytes were 15% which was low.

Based on chief complaints, past medical history the physician confirmed that herpes zoster with postherpetic neuralgia.

The initial stage of infection patient was treated with fucid cream (2%)- TID, Diclofenac- 25 mg BD and acyclovir- 400 mg TID.

**Management**

S. No	Brand name	Generic name	Category	Dose	Frequency	Route of administration	Dates of administration
1	T.Defcart	Deflazacort	Corticosteroid	6 mg	OD	Oral	25/10/19-30/10/19
2	T.Ceftas	Cefixime	Cephalosporin	20 mg	BD	Oral	25/10/19-30/10/19
3	T.Ultracet	Tramadol	Opioids analgesics	30 mg	BD	Oral	25/10/19-30/10/19
4	T.Rantac	Rabeprazole	Proton pump inhibitor	40 mg	BD	Oral	25/10/19-30/10/19
5	T.Atarax	Hydroxyzine	Antihistamine	10 mg	OD	Oral	25/10/19-30/10/19
6	T.pragaba	Pregabalin	Antiepileptic	75 mg	OD	Oral	25/10/19-31/10/19
7	T.Supradyn	Multi vitamin	Multi vitamin	1 tab	OD	Oral	25/10/19-31/10/19
8	I.Tramadol	tramadol	Opioid analgesic	2cc	SOS	IV	25/10/19-30/10/19
9	Cream Fucibet	Fucidin acid and betamethasone	Antibiotic and steroids	2% ointment	BD	Topical	25/10/19-30/10/19
10	Candid mouth paint	clotrimazole	Anti fungal	1% ointment	BD	Buccal	25/10/19-30/10/19
11	Normal saline gargling	Water and electrolytes	Electrolytes replenisher	250 ml	TID	Oral	25/10/19-30/10/19
12	NS soaks	Water and electrolytes	Electrolytes replenisher	50 ml	TID	Topical	25/10/19-30/10/19



**Figure 1:** Recovery stage of herpes zoster.

### Conclusion

A corticosteroid deflazacort was given to treat the inflammation caused due to the infection of the virus. An antibiotic, that is cephalosporin is given to prevent further infections caused by other organisms. Tramadol which is an opioid analgesic given to treat the severe pain. Rabeprazole is a proton pump inhibitor given to prevent the gastric irritation caused by the other drugs. An antihistamine, hydroxyzine given to treat the itching sensation (pruritis). To treat postherpetic neuralgia pregabalin is given.

### Bibliography

1. Harrison's principles of internal medicine 18<sup>th</sup> edition volume 1, chapter 180: 1464.
2. Cohen KR., et al. "Presentation and management of herpes zoster (shingles) in the geriatric population". *P & T: A Peer-reviewed Journal for Formulary Management* 38.4 (2013): 217-227.
3. Cvjetković D., et al. "Reactivation of herpes zoster infection by varicella-zoster virus".
4. <https://www.practo.com/health-wiki/shinglesherpes-zoster-symptoms-complications-and-treatment/72/article#4>
5. <https://www.mayoclinic.org/diseases-conditions/shingles/symptoms-causes/syc-20353054>

**Volume 3 Issue 3 March 2020**

©All rights reserved by MS Simran Kousar., et al.