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## **Original Research Article**

# A Clinico-Epidemiological Study of Herpes Zoster

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**Conflict of interest: Nil** 

#### Abstract:

**Introduction:** Herpes zoster (Shingles) is a clinical entity that is caused by the Varicella-zoster virus. It is characterized by erythematous, maculopapular, and vesicular lesions.

## Aims and Objectives:

- 1. To understand the demographic profile of herpes zoster.
- 2. To identify the clinical presentation of herpes zoster.
- 3. To observe the association of herpes zoster with other systemic conditions.
- 4. To find out the complication of herpes zoster.

**Materials and Methods:** Clinically confirmed 50 cases of herpes zoster were included in the study. A Demographic data including age, sex and socioeconomic status were recorded. Clinical details like involvement of dermatome, systemic condition and complications of herpes zoster were noted.

**Results:** In our study, Incidence of herpes zoster was almost similar in male and female with 27 males and 23 females. Majority of the patients were from 6<sup>th</sup> decade. Thoracic dermatome was the most common dermatome involved. Association with HIV (Human immunodeficiency virus) and Diabetes Mellitus was seen in 7 and 9 patients respectively. Post herpetic neuralgia was the commonest complication in our study.

Conclusion: The study is very important in identifying the demographic and clinical trend as well as act as a future guide to combat Herpes Zoster.

Keywords: Clinico-epidemiological, Herpes zoster, Varicella-zoster.

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#### Introduction

Herpes zoster is characterized by unilateral dermatomal pain and rash as the result of the reactivation of endogenous varicella- zoster virus that had persisted in latent form within sensory ganglia after an earlier attack of varicella.1 The erythematous, maculopapular, and vesicular lesions of herpes zoster are clustered rather than scattered because virus reaches the skin via sensory nerves. [1]

# **Material and Methods**

Clinically confirmed 50 cases of herpes zoster were included in the study. A Demographic data including age, sex and socioeconomic status were recorded. A detailed history was taken in all cases with history of pain accompanying skin lesions

occurring on the same dermatome. A complete general, systemic, and cutaneous examination was carried out in all the cases.

History of any systemic condition and immunosuppression like HIV (Human immunodeficiency virus) infection was taken. Complications associated with herpes zoster were also recorded. Complete blood count, Urine routine micro and Serum HIV (Human immunodeficiency virus) were done in all the patients.

#### Results

**Age group:** In our study, 6th decade was the commonest age group involved followed by 5<sup>th</sup> decade. We also found one patient with 10 years of age.

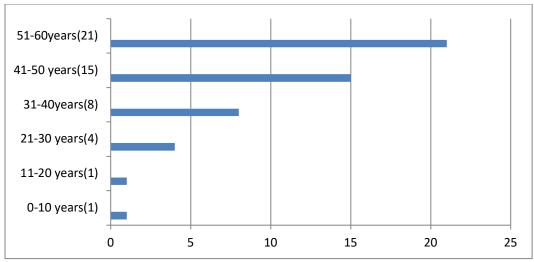


Figure 1: Age wise distribution of study participant

Sex: 27 patients were male and 23 patients were females in our study. Male to female ratio was 1.17.

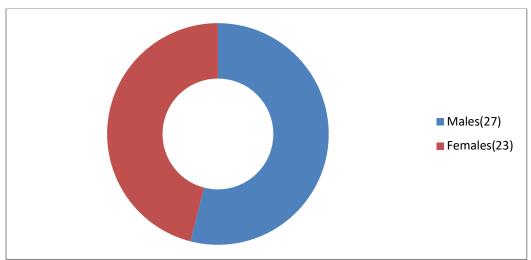


Figure 2: Gender wise distribution of study participant

**Dermatomal distribution:** Thoracic dermatome was the commonest site involved in our study.

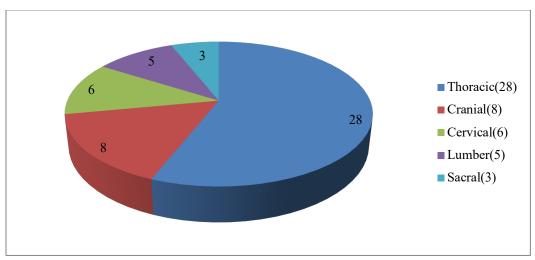


Figure 3: Distribution of study participant according to dermatome involved

Association: 7 patients in our study were found HIV Reactive and 9 patients were having diabetes mellitus.

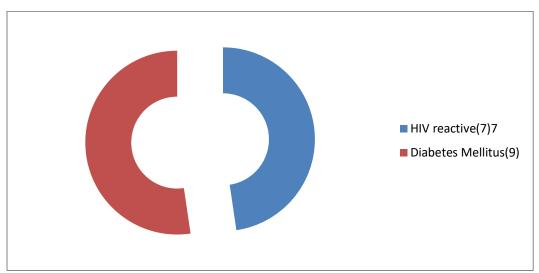
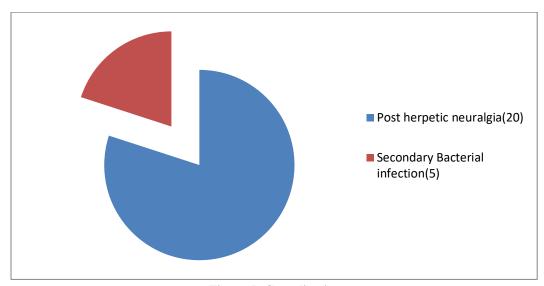


Figure 4: Distribution of study participant according to concomitant disease

Complications: Post herpetic neuralgia was the commonest complication in our study. Secondary bacterial infection was the other complication.



**Figure 5: Complication** 

#### Discussion

Majority of our patients were reported from the age group 51-60 years which is comparable to one Indian study.6 Herpes zoster is uncommon in childhood and the incidence rises with increasing age. [2] Most studies have shown the maximum incidence of herpes zoster to be in the elderly population. [3,4] Goh et al found the mean age of herpes zoster in their study to be 48.8 years and an equal sex ratio of 1:1.5 In our study the male to female sex ratio was 1.17.

The most common dermatome involved was thoracic as compared to Goh et al and other Indian study. [5,6,7] 40% of patients developed post herpetic neuralgia. The higher incidence of post herpetic neuralgia in our study may be due to predominantly elderly population in our study. The

incidence of Herpes Zoster in association with Diabetes Mellitus was 18%. Herpes zoster is considered as a marker for immune suppression in HIV infection. The incidence of HIV infection in our study was 14%. In various older Indian studies, the incidence of HIV infection ranged from 9.5% to 47.3%. [8,9,10]

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#### Conclusion

The study is very important in identifying the demographic and clinical trend as well as act as a future guide to combat Herpes Zoster.

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