

HERPES ZOSTER DUPLEX SYMMETRICUS IN AN IMMUNOCOMPETENT 70-YEAR FEMALEMankesh Lal Gambhir, Yukti Aggarwal, Kritika Pandey,
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Amritsar, Punjab, India***Source of Support:**

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Cite this article:*Gambhir M L, Aggarwal Y, Pandey K, Malhotra SK. Herpes Zoster Duplex Symmetricus in an immunocompetent 70-year female. Our Dermatol Online. 2014; 5(3): 306-307.***Introduction**

Herpes zoster is a neuroectodermal viral infection which afflicts one or more closely grouped, spinal or cranial nerves, resulting in unilateral radicular pain and vesicular eruption limited to a dermatome innervated by that nerve [1]. Bilateral involvement is rare, bilaterally symmetrical involvement is extremely rare. We hereby report a case of bilaterally symmetrical herpes zoster in an old immunocompetent female.

Case Report

A 70 year old, apparently healthy diabetic female presented with a four day history of multiple vesicular lesions with burning pain over upper back and both upper limbs in a zosteriform

pattern. On examination there were grouped vesicles distributed in a dermatomal fashion over the C8, T1, T2 region (Figs. 1 - 3). A clinical diagnosis of bilaterally symmetrical herpes zoster was made. Tzanck smear showed multinucleated giant cells. Routine investigations were within normal limits. Gynaecological examination, chest X-Ray, USG abdomen and pelvis was normal. Serological tests for HIV, Hepatitis B and C were negative. Oral valacyclovir 1g thrice a day, anti-inflammatory drugs were given initially for 7 days followed by 10 days. The lesions remained confined within the original dermatome affected and healed completely within two weeks, with minimal scarring.



Figure 1. Multiple grouped vesicular lesions in T1, T2 dermatomes.



Figure 2. Multiple grouped vesicular lesions in C8, T1 dermatomes of left upper limb.



Figure 3. Multiple grouped vesicular lesions in C8, T1 dermatomes of right upper limb.

Discussion

VZV remains dormant in peripheral sensory ganglia following varicella infection but mechanism of reactivation remains elucidated [2]. Cellular immunity plays a key role in localizing the primary varicella infection as well as preventing the reactivation of latent VZV [3]. Blocking of cell mediated defenses by rising levels of specific antibodies after exposure to exogenous varicella zoster virus or by some other mechanism may be a possibility [4].

Herpes zoster is determined by factors that influence host-virus relationship that include old age, immunosuppressive disease or drug therapy, physical trauma in the affected dermatome, local therapeutic X-Ray irradiation, female sex, black race [5].

After prodromal symptoms cutaneous eruption consists of closely grouped red papules, rapidly becoming vesicular and then pustular. They may develop in a continuous or interrupted band in the area of one, occasionally two, or rarely more contiguous dermatomes. Mucous membranes within the affected dermatomes may also be involved. The most distinctive feature of herpes zoster is the localization and distribution of the rash, which is nearly always unilateral [2].

In order of frequency, the dermatomes involved are thoracic (53%), cervical (usually C2 C3; 4-20%), trigeminal, including ophthalmic (15%) and lumbosacral (11%).⁴ The lesions rarely occur distal to the elbows and knees [5].

Tzanck smear made from the base of the lesion shows the presence of multinucleated giant cells and epithelial cells containing acidophilic intranuclear inclusion bodies which distinguishes the cutaneous lesions produced by VZV from all other vesicular eruptions except those produced by HSV [5,6].

Among neurological complications, Post Herpetic Neuralgia (PHN) is common, seen in 8 to 15 % in cases of herpes zoster in older age group. Risk factors for PHN are people older than 60 years of age, prodromal pain, severe pain in acute phase of herpes zoster, greater rash severity, more extensive sensory

abnormalities in affected dermatome and, possibly, ophthalmic herpes zoster.

Herpes zoster may recur in the same or different dermatomes or in several contiguous or non contiguous dermatomes. Multiple recurrences of herpes zoster has been reported in HIV and immunocompromised patients [1].

Although herpes zoster is typically unilateral, there has been only few reports of multiple dermatomal involvement [2,7-9] and bilateral asymmetrical [2,9] distribution of herpes zoster lesions with incidence of approximately less than 1% [10]. This presentation has been referred to a zoster duplex unilateralis or bilateralis depending on whether one or both halves of the body is involved [1]. There have been few case reports of bilaterally symmetrical herpes zoster [7,8]. Herpes zoster is usually unilateral, multiple dermatomal involvement is rare, bilateral involvement is still rarer and bilaterally symmetrical involvement is extremely rare. Bilateral VZV reactivation in absence of systemic immunocompromised condition even makes it an even rarer. This case is being reported here because of its extremely rare bilaterally symmetrical involvement.

REFERENCES

1. Rajashekhar TS, Singh Gurcharan, Shivakumar V, Okade R. Recurrent herpes zoster duplex symmetricus in HIV infection. *Indian J Dermatol.* 2008;53:33-4.
2. Peretz A, Norwatzky J, Steiner I. Herpes zoster duplex bilateralis. *J Neurol Neurosurg Psychiatry.* 2007;78:818.
3. Raza N, Iqbal P, Answer J. Recurrence of herpes zoster in an immunocompetent adult male. *J Ayub Med Coll Abbottabad.* 2005;17:80-1.
4. Sterling JC, Kurtz JB. Viral infections. In: Champion RH, Burton JL, Burns DA, Breathnach SM, Eds. *Rook's Textbook of dermatology.* 8th ed. Oxford Blackwell Science, 1998:995-1905.
5. Straus SE, Oxman MN, Schmader KE. Varicella and Herpes Zoster. In: Wolff K, Goldsmith LA, Katz SI, Gilchrist BA, Paller AS, Eds. *Fitzpatrick's Dermatology in General Medicine.* 7th ed. Mc Graw-Hill Companies, Inc, 2008:1885-98.
6. Sterling JC. Viral Infections. In: Burns T, Breathnach S, Cox N, Griffiths C, editors. *Rook's Textbook of Dermatology.* 8th ed. West Sussex, Blackwell Publishing Ltd;2010.
7. Lee SH, Jung HJ, Park MY, Ahn JY. Herpes Zoster Duplex Symmetricus in a Healthy Patient. *Korean J Dermatol.* 2011;49:1098-101.
8. Arfan-ul-Bari, Iftikhar N, ber Rahman S. Bilateral symmetrical herpes zoster in an immuno-competent patient (Herpes zoster duplex symmetricus). *J Coll Physicians Surg Pak.* 2003;13:524-5.
9. Gahalaut P, Chauhan S. Herpes zoster duplex bilateralis in an immunocompetent host. *Indian Dermatol Online J.* 2012;3:31-3.
10. Huff JC. Herpes zoster. In: *Current problems in dermatology* (Watson WL, ed). Chicago: Year Book Medical Publishers, 1988;1:19-23.