

BILATERAL HERPES ZOSTER

KG Singh, AK Bajaj, NC Dwivedi, A Merchery

A case of bilateral herpes zoster of lumbosacral region is reported in association with diabetes mellitus in a 55 years old female. The case is of interest due to bilateral distribution which is rare and sacral region involvement which is quite uncommon.

Key Words : Herpes Zoster, Diabetes mellitus

Introduction

Herpes zoster is a neurocutaneous viral infection caused by varicella zoster virus (VZV). Usually it involves a single dermatome at a time but in some cases one or two ipsilateral adjacent dermatomes may be involved simultaneously. The lesions are unilateral and commonly seen in thoracic, cervical and uncommonly in sacral area. We report a case of bilateral herpes zoster.

Case Report

A 55 years old female noticed a single vesicular lesion on left thigh. Within 2-3 days similar lesions appeared on the front and back of upper part of left thigh. On days 5-6 lesions appeared on the right thigh and extended to cover the buttocks and lower back. The lesions were intensely painful. During the same illness she noticed severe burning during micturition.

On examination the patient had multiple grouped vesicular lesions on erythematous base. The lesions were distributed in dermatomal pattern of L₁,

L₂, S₃, S₄ on left side and L₁, L₂, L₃, S₃, S₄ on right side (Fig. 1). A few lesions were eroded showing serous discharge. The patient was a known diabetic for last 3 years with latest fasting blood sugar levels of 418 mg/dl. She did not recollect any



Fig. 1. Bilateral grouped vesicular lesions in lumbo-sacral area

episode of chickenpox infection in the past. She also had cheilitis and complained of constipation.

On systemic examination central nervous system, cardiovascular and respiratory systems did not reveal any positive findings. On investigation Tzanck test showed acantholytic cells. Skiagram chest PA view was within normal limits

From the Departments of Dermatology and STD, and Medicine, M L N Medical College, Allahabad - 211001, India.

Address correspondence to : Dr K G Singh

Urine examination showed 3+ sugar with 6-8 pus cells/HPF. Total and differential counts were within normal limits. AG ratio was normal.

Patient was given acyclovir and norflox. Burning in micturition was relieved and herpetic lesion also disappeared in 10 days. However, pain and burning in the affected skin persisted for 3-4 months after subsidence of lesions.

Comments

Herpes zoster is usually a localised unilateral neurocutaneous infection by varicella zoster virus (VZV) that follows the distribution of a sensory nerve and that is thought to occur when VZV latent in the sensory ganglion reactivates. Factors reported to determine the occurrence of zoster include waning specific cell mediated immunity to VZV related to age, immunosuppressive disease or drug therapy, local trauma such as surgery, local therapeutic X-ray irradiation and possibly local musculo-skeletal problem.

Zoster does not occur with equal frequency in all areas of skin. Its frequency in thoracic dermatomes is 50%, cranial nerves 20%, cervical dematomes 14%, lumbar 14% and sacral only 2%.¹⁻³

Although most cases of zoster are localised, in some instances isolated papules and vesicles outside the dermatome occur. These skin lesions are identical to those seen in varicella. These widespread skin lesions are thought to reflect haematogenous dissemination of VZV and to reflect host immune defences that are inadequate to contain the infection. The virus is thought to spread

to distant sites in circulating leucocytes primarily monocytes.

The frequency of cutaneous dissemination in all cases of zoster reported in literature is low (approximately 2%). Cutaneous dissemination occurs with greater frequency in elderly patients and the frequency of dissemination in immunosuppressed may be quite high accounting for 15-30% of cases.³⁻⁵

The increased incidence of dissemination in patients with certain disorders of haemopoietic system is probably related to a breakdown of host resistance in these patients. The hypogammaglobulinemia is reported to occur in patients with chronic lymphocytic leukemia and lymphosarcoma. The deficiency in antibody production is noticed in patients with multiple myeloma.⁶ A recently appreciated disease is acquired immunodeficiency syndrome (AIDS) for which recurrent herpes zoster is characteristic sign, dissemination of VZV infection can occur.³

Though the studies of disseminated herpes zoster are very few it is worth mentioning a report of Marseles et al.⁶ In their report of 17 cases of disseminated zoster, 11 cases (65%) had serious underlying disease, primary malignant disease of haemopoietic system, 9 of these patients were treated with adrenocorticosteroid hormone, X-ray or radiomimetic drug prior to dissemination of herpetic lesions. Two of 6 patients without other illness received adrenocorticotrophic hormone just prior to generalised vesicular eruption.⁶

Indian reports of disseminated zoster are very few. A case was reported by Verma et al⁷ in 1984 of herpes zoster ophthalmicus with dissemination of cutaneous lesions without any predisposing cause. The other case was reported in 1989 by Bumb et al⁸ in a 65 year old male who was immunocompetent with meningoencephalitis.

Isolated case reports in the literature also document bilateral zoster. Undoubtedly such cases occur but they remain exceedingly rare accounting for less than 1.0% cases.^{2,3}

Present case is important from following points of view : It has multiple dermatomal as well as bilateral involvement. Another interesting feature is involvement of sacral dermatomes which is quite uncommon.

Though there is no evidence of any underlying cause like lymphoma, leukemia, X-ray radiation or corticosteroid therapy, the patient did have diabetes mellitus. Whether occurrence of diabetes mellitus in present

case is casual or causal is difficult comment.

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