

Association of Disseminated Cutaneous Herpes Zoster and uncontrolled Diabetes Mellitus type II: A Case Report

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Case Report

Patient is a 73-year-old female who was presented to the out-patients department with 2 days' history of acute onset of severe burning sensation over the right thigh, followed by the occurrence of multi-grouped vesicles. She mentioned remembering having chicken pox during her childhood. She has had diabetes mellitus type II for the last 23 year and using insulin for controlling the glucose level. Her daughter stated that the glucose level was poorly controlled most of the time due to the patient's life style and had concerns over frequent injections and the lack of perception of benefits. A laboratory investigation show patient's random blood glucose, fasting blood glucose and HbA1c were 345 mg/dl, 222 mg/dl and 10.3 % respectively. All other investigations and laboratory examinations were normal. Diagnosis of herpes zoster case was made. Treatment with acyclovir 1 gm/8 hrs a day continued to make an improvement in the skin lesions but these never resolved completely. After 4 days of treatment, multiple papules and vesicles over trunk were seen (more than 20 lesions). According to the new finding, a diagnosis of Disseminated Cutaneous Herpes Zoster was made. Disseminated Cutaneous Herpes Zoster was defined as more than 20 skin lesions beyond the primary lesions [1]. The patient was treated with IV acyclovir with a dosage of 10mg/kg/8hrs for three days followed by valacyclovir 1gm/8hrs for 10 days. Patient's skin lesions showed improvement and glucose level came under control after 4 weeks of starting the treatment.

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ABSTRACT

Disseminated cutaneous Herpes zoster is a clinical manifestation which is rare and seen almost exclusively in immunocompetent patients and due to the reactivation of latent Varicella zoster virus. We are reporting a case of disseminated herpes zoster in an elderly uncontrolled diabetic mellitus type II patient. Early diagnosis and antiviral therapy are playing a significant role to reduce morbidity and mortality. A brief analysis of literature on this subject has been given.

KEY WORDS: Disseminated Cutaneous Herpes Zoster
Herpes zoster Single nucleotide

Discussion

Disseminated cutaneous herpes zoster in healthy persons is rare, however it has been described in immunocompetent patients and can vary in presentation depending on the patient's age and immune status [2,3]. Abdul Latheefand Pavithran showed in their study that "In 70% of the patients, no provocative factors could be elicited. Among the rest (30%), the most common provocative factor was steroid intake for various ailments (20 cases) followed by malignancies. (16) With or without irradiation (19 cases) diabetes mellitus (11 cases) and HIV infection (10 cases)" [3]. The association of type II diabetes mellitus herpes zoster has been studied before. Studies have reported Diabetes mellitus as one of the many risk factors for herpes zoster infection [1,4-7]. Decreased cell mediated immunity was witnessed in patients with type II diabetes, making them vulnerable to infections [4,8]. A previous study found that patients with diabetes mellitus type II had a clear lower herpes zoster-specific immunity compared to healthy individuals [9,10]. Previous studies also observed that undiagnosed diabetes mellitus type II is more common in herpes zoster patients than in other patients [11]. Only a few cases of disseminated herpes zoster in diabetes have been described. Malkud and Patil in 2015 conclude that "Disseminated herpes zoster is a potentially serious infection in an uncontrolled diabetic patient. Early

diagnosis and prompt treatment is utmost important” [4]. In conclusion, disseminated herpes zoster can happen in any immunocompetent patient. In our patient, older age and diabetes mellitus have participated in the dissemination of herpes zoster. Medical staff should be educated about the significance of diabetes mellitus compromising the immune competency against herpes zoster infection.

Conflict of Interest

I declare that we have no conflict of interest.

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