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A Case Report Of Disseminated Herpes Zoster In An Immunocompetent Person

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ABSTRACT

Background: *Disseminated cutaneous herpes zoster in the immunocompetent is uncommon.* ***Case presentation***: *We report a case of disseminated herpes zoster in a healthy adult with no evidence of immunosuppression.*

Management and outcome: *Patient underwent complete clinical examination followed by which complete blood count, routine blood biochemistry, liver function test and chest x-ray were done and found to be in normal limits. Serology for Human Immunodeficiency Virus (HIV) was non-reactive. Relating the history, clinical findings and cytology, a diagnosis of disseminated herpes zoster (HZ) was made. Therefore, the patient was started on oral cefixime along with oral acyclovir for 7 days. Acyclovir was continued for another week. Lesions healed with minimal scar and no visceral complications.*

Conclusion: *We intend to highlight that disseminated zoster can occur in immunocompetent individuals. Quick identification and timely treatment can prevent serious complications.*

KEYWORDS : Disseminated herpes zoster, healthy adult

Introduction

Disseminated shingles in patients with immunosuppression (HIV, hematological malignancy and chemotherapy) is well documented. However, disseminated zoster in healthy people is unusual. We describe one such case of disseminated cutaneous zoster without obvious immunosuppression.

Case Presentation

A 32 year old healthy male came to us with a 3 day history of severe pain over buttock, penis and scrotum on the left side. He complained of dysuria and painful defecation. History of spread of vesicles to the face, neck chest and back appearing singly over past 24 hours was noted. No systemic complaints were given .The patient had chickenpox in his teens. There was no past history of diabetes, malignancy, HIV, major systemic illness or intake of immunosuppressive drugs. Examination revealed cluster of vesicular lesions with erythematous skin along S2 dermatome on the left not crossing the midline. (Figures 1, 2, 3) Few erosions and ulcerations were present covered with yellow crusts indicating secondary infection. Discrete scattered single vesicles were present on the neck, chest, face and back (figures 4, 5, 6). He was afebrile (37 C). Inguinal lymph nodes were enlarged and tender. Systemic examination was normal.

Figure No.1 shows cluster of vesicular lesions on the left side of perineum not crossing the midline.

Figure No.2 shows cluster of vesicular lesions on the left side of

Figure No.3 shows cluster of vesicular lesions on the left side of the gluteal region not crossing the midline

Figure No. 4 shows ruptured vesicle with erosion near the left areola

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Figure no.5 shows discrete scattered single vesicles on the neck

Figure no. 6 shows discrete scattered single vesicles on the face

Complete blood count, routine blood biochemistry, liver function tests, and chest x-ray were in normal limits. Serology for Human Immunodeficiency Virus (HIV) was non reactive.

Tzanck smear from the vesicle fluid showed multinucleated giant calls, acantholytic cells and inflammatory cells.

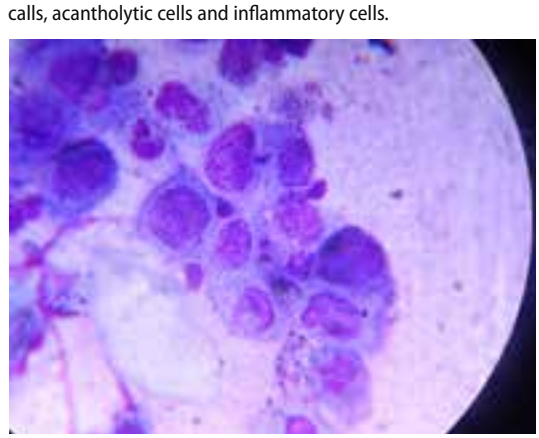

Figure No. 4 shows Tzanck smear from the vesicle fluid showed multinucleated giant calls, acantholytic cells and inflammatory cells.

Relating the history, clinical findings and cytology, a diagnosis of disseminated HZ was made. Therefore, the patient was started on oral cefixime 200 mg twice daily with oral acyclovir 800 mg five times per day for 7days. Acyclovir was continued for another week. Analgesics were prescribed.

Discussion

Herpes zoster (HZ) is caused by reactivation of latent varicella-zoster

virus (VZV) characterized by unilateral vesicular eruptions in a dermatomal pattern. Primary infection with VZV results in chicken pox. Following primary infection, the virus remains latent in the sensory dorsal root ganglia from where it can reactivate.

Disseminated cutaneous zoster has been defined as more than 20 vesicles outside the area of primary and adjacent dermatomes [1]. In 2% to 10% of immunocompromised patients with zoster, disseminated cutaneous disease occurs. Viremia in patients with disseminated zoster is leucocyte associated due to delayed immune response (10, 11, and 12). This complication of zoster has been described in immunocompromised persons (HIV, malignancy and those on immunosuppressive medication) and reported to be as common as 10% – 40% [1,2]. Patients with cutaneous dissemination of VZV are at risk of infection of visceral organs, particularly lungs, liver and brain. Other complications include corneal ulceration and post herpetic neuralgia [1]. Secondary attack rate for viral transmission is high in disseminated zoster Therefore, recognition and aggressive management of disseminated herpes zoster infection mainly in the elderly is important. The treatment of choice for disseminated zoster is intravenous Acyclovir 10 mg/kg every 8 hours for 5–7 days.

Disseminated cutaneous zoster in otherwise fit individuals without apparent immunosupression is uncommon. Cutaneous dissemination of HZ in healthy people has been earlier published in literature as single case reports or small case series more commonly in immunocompetent elderly patients [3-8, 13]. Mittal et al [(9)] reported 11 cases of disseminated herpes zoster without serious immunosupression. Our patient was a 32 year old healthy male with typical features of disseminated cutaneous herpes zoster. Dissemination occurred by third day of the eruption. The cytology supported the clinical diagnosis of VZV. Disseminated cutaneous zoster in healthy adult is extremely rare.

Conclusion

In conclusion, disseminated shingles can occur in any immunocompetent host, although more commonly in the elderly. Overall mortality and morbidity is low if prompt antiviral therapy is administered in those with sound immunity. Early diagnosis and treatment can reduce complications.

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