DISSEMINATED VARICELLA ZOSTER IN AN IMMUNOCOMPETENT PATIENT

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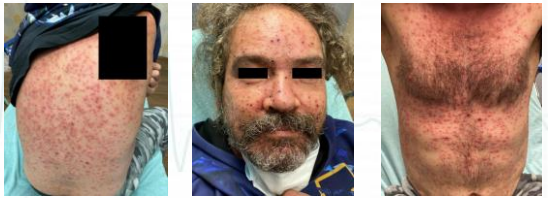
INTRODUCTION

As a primary infection, varicella zoster is characterized as a diffuse vesicular rash in various stages of development. Upon reactivation, the virus manifests as zoster, characterized as a unilateral vesicular eruption (< 20 lesions) along the path of a dermatome. Disseminated disease is diagnosed when there are 20 or more lesions uniformly distributed within 1 week. Other manifestations of disseminated disease includes encephalitis, pneumonitis or transaminitis.

RESULTS

BMP and CBC unremarkable. LFTs mildly elevated, AST 64, ALT 79. CRP elevated 1.7, ESR WNL.
CXR: diffuse interstitial prominence (atypical infection).
Rapid Strep A, COVID-19, Flu, RSV: all negative.
HSV1/HSV2 PCR, HSV1/HSV2 NAAT swab from unroofed lesion: negative
HIV1/HIV2 antibody, HIV1 RNA and p24 antigen: negative
Monospot, treponema pallidum antibodies: negative
Blood, throat culture: no growth
Varicella IgG: positive. VZV PCR revealed 44,777 copies/mL.

IMAGES



Diffuse erythematous vesiculopustular lesions of various stages of healing with crusting on the posterior torso, face, and anterior torso

CASE REPORT

50 y/o male with PMHx of lumbar DJD p/w 4 day hx of diffuse red rash, subjective fever of 102.7 F and weakness. Rash began on the chest then spread to his shoulders, back, face, bilateral upper and lower extremities, groin, and lastly, palms of his hands and soles of his feet. Described as an erythematous pustular and vesicular rash in various stages of healing covering most skin surfaces. Denies having varicella as a child and never been vaccinated against varicella.
VS: BP 116/65, HR 76 bpm, RR 16, SpO2 95%, 98.9 F

DISCUSSION

DDX: disseminated zoster, primary varicella, monkeypox, drug reaction. Given the presentation and medical definitions, the most likely dx is disseminated varicella zoster.
Tx: Acyclovir 10 mg/kg IV q8 hrs > Valacyclovir 1 gm TID for 10 days.
In disseminated dx, the virus travels outside single dermatome and spreads diffusely across multiple organ systems. Usually this occurs in patients with immune defect such as HIV, cancer or transplant patients due to reduced T-cell immunity; which was absent in our case report. Other cases of disseminated dx in immunocompetent patients occur in individuals over 65 y/o, unlike our patient.

REFERENCES

Petrun, Branden, et al. “Disseminated varicella-zoster virus in an immunocompetent adult.” *Dermatology Online Journal*, vol. 21, no. 3, 2015,
Varicella pneumonia in adults. A.H. Mohsen, M. McKendrick. European Respiratory Journal. May 2003. DOI: 10.1183/09031936.03.00103202
Gupta, S et al. “A rare case of disseminated cutaneous zoster in an immunocompetent patient.” *BMC family practice* vol. 6 50. 14 Dec. 2005, doi:10.1186/1471-2296-6-50