

**IMAGES IN EMERGENCY MEDICINE**

## Infectious Disease

# Man with a rash

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## 1 | CASE PRESENTATION

A 57-year-old male kidney transplant recipient presented to the emergency department with a 4-day history of a painless, non-pruritic rash that was initially confined to the right anterolateral midchest and then seemed to spread to his thorax, extremities, and scalp. There was no history of fever or new medications or other exposures. On examination, his vital signs were normal. Multiple vesicular lesions on an erythematous base were clustered on the right anterolateral midchest wall (Figure 1). Similar vesicular lesions in various stages of healing were scattered diffusely on his thorax, extremities, and scalp (Figures 2 and 3).

## 2 | DIAGNOSIS

Disseminated varicella zoster.

## 3 | DISCUSSION

Disseminated varicella zoster has been defined by the occurrence of at least 20 vesicular lesions outside of the primary and immediately adjacent dermatomes affected by zoster.<sup>1</sup> Immunocompromised individuals with impaired T cell immunity, including organ and hematopoietic stem cell transplant recipients, persons receiving immunosuppressive therapy, and patients with leukemia, lymphoma, or HIV infection, are at increased risk of developing herpes zoster and experiencing more severe disease.<sup>2</sup> Approximately two-thirds of adult renal transplant recipients with disseminated varicella zoster will develop visceral complications including disseminated intravascular coagulation, pneumonitis, hepatitis, pancreatitis, and meningoencephalitis.<sup>3</sup> Adult



**FIGURE 1** Cluster of vesicular lesions on an erythematous base on the anterolateral chest wall

renal transplant recipients with disseminated varicella zoster have a mortality rate of 17%.<sup>3</sup> Treatment of disseminated varicella zoster in immunocompromised patients is with intravenous acyclovir.<sup>3</sup> Our patient was treated empirically with intravenous acyclovir and admitted to the hospital. Polymerase chain reaction testing of a lesional swab later confirmed the presence of varicella zoster virus.

Other diagnoses to consider in the patient with a diffuse vesicular rash include disseminated herpes simplex and viral exanthems,

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**FIGURE 2** Scattered vesicular lesions on the chest and back



**FIGURE 3** Scattered vesicular lesions on the scalp

especially those caused by enteroviruses.<sup>4,5</sup> The lack of prominent mucosal involvement in this patient made those diagnoses less likely. The diagnosis of varicella zoster may be dismissed when the classic lesions are distributed outside of a dermatomal pattern. This diagnosis

must always be kept in mind, especially in an immunocompromised patient.

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