



Diffuse varicella zoster virus reactivation in critically ill immunocompromised patient

Jolan Malherbe^{*} , Jeanne Iachkine, Damien du Cheyron and Xavier Valette 

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A 73-year-old patient on chronic hemodialysis was admitted to intensive care unit (ICU) for microscopic polyangiitis relapse with acute respiratory distress syndrome due to alveolar hemorrhage. Rituximab and intravenous corticosteroids were administered in addition to protective mechanical ventilation. At day 21, the patient developed cutaneous lesions appearing on the back and then spreading within few days on the left arm, the torso and the right arm. Several noncontiguous lesions coexisted with vesicles connecting in large bullous pustules, ulcerations and crusting (Fig. 1a–c). Concomitantly, his respiratory condition deteriorated with worsening hypoxemia related to interstitial pneumonia (Fig. 1d). Hepatic cytolysis was also observed. Cutaneous biopsy

revealed typical signs of Herpesviridae infection with acantholysis, nuclear vacuolization, and nuclear inclusions (Fig. 1e). Varicella zoster virus (VZV) polymerase chain reaction was positive in skin biopsy, blood and respiratory samples. Despite prompt treatment with acyclovir, the patient developed multiorgan failure and died few days later. Diffuse VZV reactivation is a rare, but potentially life-threatening complication in critically ill immunocompromised patients. Atypical skin lesions could be seen in immunocompromised hosts with widespread dissemination comprising noncontiguous dermatomes, multiorgan involvement and severe prognosis. Patients who could benefit from prophylaxis in ICU have yet to be identified in further studies.

^{*}Correspondence: malherbe-j@chu-caen.fr
Department of Medical Intensive Care, CHU de Caen, Caen, France



Fig. 1 **a** Left arm with bullous, pustules, ulcerations and crusting lesions. **b** Lesion of the back consistent with noncontiguous lesions. **c** Vesicles of the right arm. **d** Interstitial pneumonia on chest radiography. **e** Typical histological signs of Herpesviridae infection with acantholysis (red arrow), nuclear vacuolization (blue arrow) and nuclear inclusions (black arrow)

Compliance with ethical standards

Conflicts of interest

On behalf of all authors, the corresponding author states that they have no conflict of interest.

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