

Introduction

- Bullous systemic lupus erythematosus is a rare autoimmune blistering condition characterized by an acute vesiculobullous eruption in patients with systemic lupus erythematosus (SLE).
- Individuals with SLE and lupus nephritis have a greater incidence of herpes zoster compared to the general population.^{1,2}
- A rare clinical variant of herpes zoster known as bullous herpes zoster has been described in few cases of patients with SLE and lupus nephritis.^{2,3}
- Bullous herpes zoster in the setting of bullous SLE has not been described to date.
- We report a case of bullous herpes zoster in a patient with bullous SLE.

Case Presentation

- A 55-year-old African American woman with a history of SLE and lupus nephritis on chronic immunosuppression presented in December 2022 for evaluation of lesions on the abdomen.
- Exam revealed bullae on the left abdomen (**Figure 1**). Two shave biopsies confirmed bullous SLE.
- In January 2023, the patient reported new lesions on the right side of the face and pain in the right eye region.
- On exam, there were coalescing bullae at the right temporal region and scattered bullae with overlying yellow-brown crust on the right side of the mouth (**Figure 2**).
- Due to concern for herpes zoster ophthalmicus, the patient was admitted and began IV acyclovir and methylprednisolone. She also began IV vancomycin and ampicillin-sulbactam due to concern for superimposed bacterial cellulitis.
- Viral PCR of the facial bullae returned positive for VZV, and bacterial culture returned positive for MSSA.
- The patient was discharged on a 12-day course of valacyclovir with improvement of the lesions at follow-up.

Case Presentation Continued

- In March 2023, the patient developed crusted, erythematous ulcers in the right mandibular region and right upper neck (**Figure 3A**), and pustules on the scalp (**Figure 3B**).
- A viral PCR swab from the right neck ulcerations returned positive for VZV, and bacterial cultures from the scalp pustules were positive for MRSA. Two shave biopsies of the scalp and right neck lesions confirmed bullous herpes zoster with MRSA superinfection.
- The patient was admitted for disseminated herpes zoster and began a 14-day course of IV acyclovir in addition to a 14-day course of IV linezolid. She also began oral doxycycline, mupirocin ointment, and gabapentin, with clinical improvement during hospitalization. She was discharged on valacyclovir.
- During follow-up in April 2023, there was healing of the right-sided facial and neck wounds, with flat, dark brown scarring over regions of previous bullae formation and ulcerations (**Figure 4**).

Discussion

- Bullous SLE is a rare cutaneous manifestation of SLE.
- Patients with SLE and lupus nephritis exhibit an increased risk for herpes zoster infection due to abnormal T-cell cytotoxicity in the context of immunosuppressant use.¹
- The bullous variant of herpes zoster has been described in few cases, with 64% (7/11) of all cases occurring in the setting of immunosuppression.²⁻⁶
- Immunosuppression may be a risk factor for bullous herpes zoster. Bullae formation in bullous herpes zoster may arise from superinfection with exfoliative-toxin producing *Staphylococcus*.⁴ Patients with SLE may be predisposed to bullous herpes zoster due to enhanced colonization by staphylococci species.⁷
- Bullous herpes zoster has been described in patients with a history of SLE and lupus nephritis on immunosuppressants in two reported cases, with both cases resulting in disseminated herpes zoster.^{2,3}
- We report the first case of bullous herpes zoster in the setting of bullous SLE. The presence of bullous SLE may have precipitated the rapid progression of disseminated herpes zoster.
- Given high rates of morbidity and mortality in disseminated herpes zoster infection,⁶ the presence of bullae development in patients with SLE should raise a high index of suspicion for herpes zoster infection and prompt systemic workup.

Figures



Figure 1. Bullae on the left abdomen.



Figure 2. Coalescing bullae at the right temporal region and scattered bullae with overlying yellow-brown crust on the right side of the mouth.



Figure 3. (A) Crusted, erythematous ulcers in the right mandibular region and right upper neck. (B) Pustules on the scalp.



Figure 4. Flat, dark brown scarring over regions of previous bullae formation and ulcerations

References

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