

Widespread cutaneous reaction to the Johnson & Johnson Ad26.COV2.S vaccine



To the Editor: We read with interest the report of the cutaneous eruption to Janssen Ad26.COV2.S vaccine by Lospinoso et al.¹ We report another such reaction with slightly different clinical features, presenting with a largely cutaneous component.

The Janssen Ad26.COV2.S vaccine against COVID-19 represents the first single-dose option used in prevention of infection. It employs a viral vector using modified adenovirus DNA to produce the SARS-CoV-2 spike protein to illicit an immune response and has proven 66% effective in preventing COVID-19 infection.²⁻⁴ Only one severe hypersensitivity reaction and no anaphylactic reactions were reported during the safety and efficacy trials.^{3,4} On April 12, 2021, the Janssen Ad26.COV2.S vaccine distribution was temporarily suspended due to a rare side effect of cerebral venous sinus thrombosis combined with thrombocytopenia with antibodies to platelet factor 4; however, the vaccine distribution was resumed on April 23, 2021.⁵ We report a case of a diffuse erythematous dermatitis developing in a patient who received the Janssen Ad26.COV2.S vaccine.

An 80-year-old woman with a history of factor V Leiden, hypertension, hyperlipidemia, and chronic thrombocytopenia presented to the emergency department with febrile episodes and diffusely scattered, pruritic, erythematous-to-violaceous edematous plaques involving the entire cutaneous surface with shallow erosions of posterior oropharynx and mucosal lips (Fig 1).

Punch biopsy revealed spongiotic and interface dermatitis with superficial and deep lymphocytic infiltrate consistent with a drug eruption or viral exanthem. Laboratory evaluation at the time of presentation was remarkable only for thrombocytopenia and mild anemia. Extensive workup included chest X-ray, computed tomography of the abdomen and pelvis, throat culture, anti-streptolysin O, blood cultures, urinalysis, SARS-CoV-2 polymerase chain reaction, HIV1/2 antigen and antibodies, hepatitis C antibodies, viral respiratory panel, influenza A and B virus polymerase chain reaction, parvovirus IgG and Immunoglobulin M antibodies, antinuclear



Fig 1. Widespread erythematous, edematous eruption.

antibodies, anti-Smith antibodies, anti-double-stranded DNA antibodies, and C3 and C4, which were all normal. The patient underwent workup for her chronic thrombocytopenia with no evidence of overt malignancy. Bone marrow biopsy revealed normocellular marrow with trilineage hematopoiesis, and flow cytometry was negative for a clonal lymphoid or aberrant myeloid population. Increased numbers of macrophages with focal hemophagocytosis were noted on bone marrow biopsy. However, serum ferritin concentration was 273 ng/mL, and the patient did not meet the criteria for hemophagocytic syndrome. The patient denied any new medications (prescription or over the counter) or recent medication changes but reported receiving the Janssen Ad26.COV2.S vaccination 3 days prior to the development of her rash. She was treated with topical triamcinolone ointment, antihistamines (cetirizine 10 mg daily), and prednisone 20 mg daily with resolution of her eruption.

Although a direct causal relationship between the cutaneous eruption observed in our patient and the vaccination cannot be confirmed, extensive workup and thorough medication history revealed no other underlying cause. Our patient's dermatitis proved nonlife-threatening, and improvement was achieved with oral prednisone, antihistamines, and topical steroids.

Our case suggests a possible association of the Janssen Ad26.COV2.S vaccination with a

nonlife-threatening, diffuse cutaneous eruption. We are responding to expand the reported clinical presentations of reactions to the Janssen Ad26.COVS vaccine, while widespread reactions to the vaccine still appear to be exceedingly rare.

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Conflicts of interest

None disclosed.

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