JOURNAL OF DRUGS IN DERMATOLOGY
JDD
DRUGS • DEVICES • METHODS

Senior Resident Peer-to-Peer Case Studies

1)

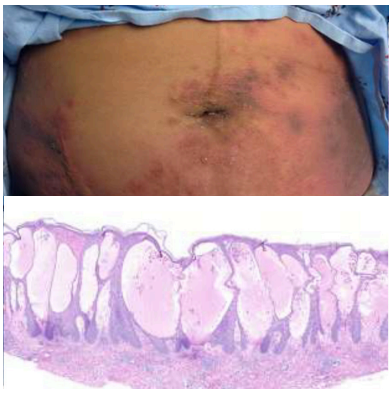

Photo Credit: Swetha Pathak, MD and Kathleen Mannava, MD

A 39-year-old Hispanic female with no chronic medical problems presented to the emergency department (ED) for a painful and pruritic eruption after cesarean section delivery. In the ED, she was hemodynamically stable with unremarkable lab work and normal WBC, relative eosinophils 6%. ROS was notable for chills but negative for fever, pain, shortness of breath, abdominal pain, nausea, and vomiting. She received one dose of IV vancomycin and a dermatologic consultation was requested. The dermatology consultation service evaluated the patient and performed a shave biopsy for H&E and direct immunofluorescence with the following findings: H&E revealed acute spongiosis with numerous eosinophils. All of the following are in the pathologic differential diagnosis for this patient ***except:***

A. Pemphigoid gestationis
B. Linear IgA Bullous Dermatosis
C. Pemphigus vulgaris
D. Bullous pemphigoid
E. Allergic contact dermatitis

2)

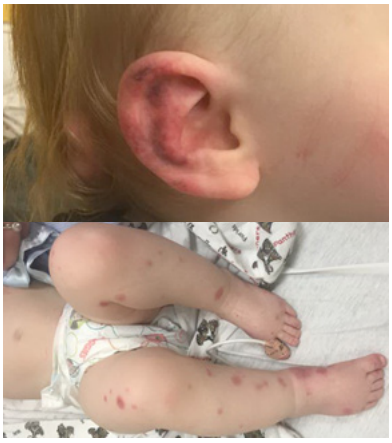

Photo Credit: Courtney Bagayoko, MD

A 13-month-old male presents to the dermatology consultation service for edema and purpura. Three days after his immunizations (influenza, MMRV, Hib, Hepatitis A, and Prevnar) he developed ear redness and swelling. Along with this, he also developed purpuric and targetoid plaques on his face that spread to his arms and legs, as well as some swelling of his hands and feet. In the ED, he was afebrile in no apparent distress. They denied changes in stool, abdominal pain, and joint swelling, redness, or pain. Of note, he had a similar reaction 6 months prior after receiving his first influenza immunization. This reaction prompted referral to an allergist where blood testing was positive for egg allergy and a skin prick test for egg allergy was negative.A skin biopsy was preformed, which revealed leukocytoclastic vasculitis with IgA deposition around the vessel walls What is the correct diagnosis in this patient?.

A. Acute hemorrhagic edema of infancy
B. Henoch-Schönlein purpura
C. Chronic bullous dermatosis of childhood
D. Sweet's syndrome
E. Erythema multiforme

3)

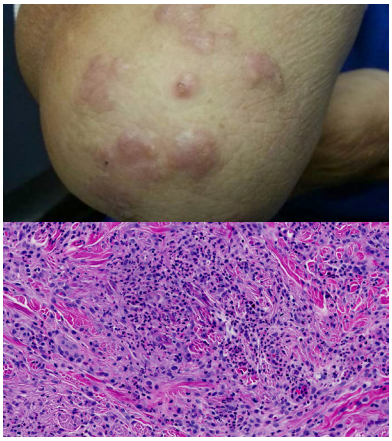

Photo Credit: Casey Watkins, MD and Kathleen Mannava, MD

A 72-year-old male with a history of IgA lambda multiple myeloma, severe peripheral vascular disease, and chronic renal failure was referred dermatology for evaluation of an eruption on the bilateral elbows.These lesions appeared shortly after initiation of treatment for multiple myeloma with lenalidomide (Revlimid). He reported gradual improvement over the past 2 years. An exam revealed symmetrically distributed erythematous to violaceous indurated papules and small plaques on the bilateral elbows extending to the extensor forearms. Biopsy of the left elbow showed mixed inflammatory infiltrates composed of numerous neutrophils, nuclear dust, and lymphocytes within the dermis.There were also areas of fibrosis and foci with changes suggestive of chronic vasculitis. What is the most commonly associated underlying condition in patients who present with early onset?

A. Human immunodeficiency virus
B. Human polyomavirus
C. Human herpes virus 8
D. Malignancy
E. Rheumatoid arthritis

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The content of these case studies, ideal to review during peer study groups, was developed by Chief Resident Robin Lewallen, MD under the guidance of dermatologist William W Huang, MD, MPH, FAAD, Assistant Professor of Dermatology, Wake Forest University School of Medicine.

Winner of the Resident of the Year 2016 JDD Leaders of Distinction Award

Robin Lewallen, MD
Chief Resident
Wake Forest, Winston-Salem, North Carolina

Case Study Answers

1) B. The correct answer is B: Linear IgA Bullous Dermatosis.

Explanation/Literature Review

The patient in this case had a positive direct immunofluorescence for IgG and C3 consistent with pemphigoid gestationis, formerly known as herpes gestationis. The H&E findings of eosinophilic spongiosis have the "HAAPPIE" differential, which includes herpes gestationis, arthropod bite, allergic contact dermatitis, pemphigus, pemphigoid, incontinentia pigmenti, and erythema toxicum neonatorum. While linear IgA bullous dermatosis could be in the clinical differential, she did have this eruption prior to the administration of vancomycin and eosinophic spongiosis would not be seen with this predominately neutrophilic condition..

2) A. The correct answer is A: Acute hemorrhagic edema of infancy.

Explanation/Literature Review

Acute hemorrhagic edema of infancy (AHEI) is a form of cutaneous small vessel vasculitis seen in young children under the age of 2. The cutaneous lesions are plaques with varying degrees of hemorrhage and edema that can sometimes take on a targetoid appearance. AHEI was previously classified as a variant of Henoch-Schönlein purpura (HSP) but is now considered its own discinct clinical entitiy. Unlike HSP, these patients do not develop systemic involvement of the gastrointestinal or renal systems. Approximately 75% of patients with AHEI have associated infection, drug exposure, or immunization preceeding the development of cutaneous lesions.

3) C. The correct answer is A: Human immunodeficiency virus.

Explanation/Literature Review

Erythema elevatum diutinum (EED) is characterized by red-brown to violaceous papules, plaques and nodules typically distributed over extensor surfaces. EED has been described in association with a number of systemic diseases, most commonly HIV which presents with earlier onset. EED has also been associated with infections, autoimmune diseases, inflammatory conditions, and hematologic disorders especially IgA paraproteinemia. Immune complex deposition is thought to play a major role in this disease. Leukocytoclastic vasculitis is seen in early lesions, followed by fibrotic replacement of the dermis in older lesions. The majority of cases resolve over a period of 5 to 10 years. Dapsone, NSAIDs, niacinamide, tetracyclines, chloroquine, colchicine, low dose methotrexate and plasmapheresis have all been reported with success. Relapses are common with discontinuation of treatment. Intralesional corticosteroids may be helpful for mild cases.