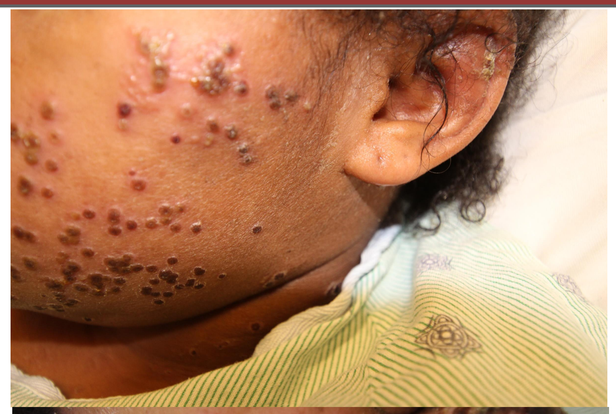
Kaposi Varicelliform Eruption: A Case Report and Review of the Literature

Shelja Patel, MD, Anita Gade, DO, Alan Falkoff, MD
Departments of Family Medicine and Internal Medicine, Stamford Hospital, Stamford, CT

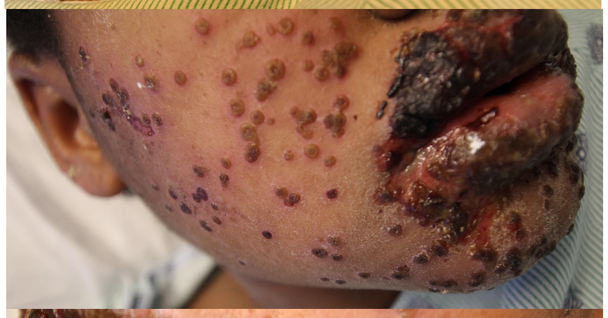
Background

- Kaposi Varicelliform Eruption (KVE) is a rare dermatological infection caused by reactivation of herpes simplex virus, and predominantly occurs in patients with a history atopic dermatitis.
- KVE has been theorized to occur due to immune dysfunction, although the pathogenesis has not been fully elucidated.

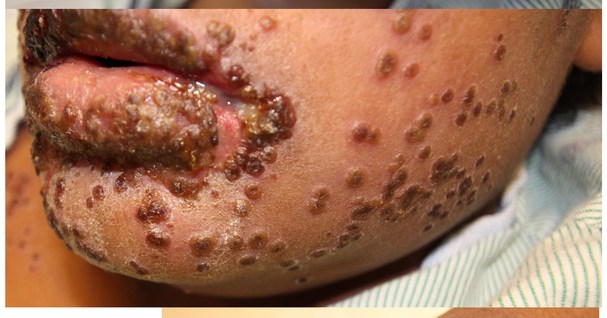
Images



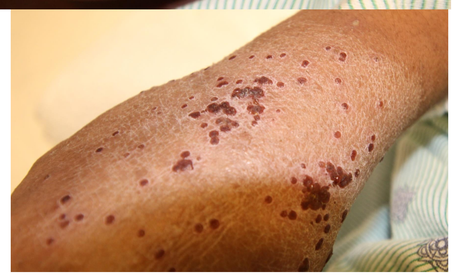
eczematous changes with honey crusting on cheek and ears



hemorrhagic crusting and umbilicated vesiculopustular lesions



honey crusting superimposed on perioral lesions



vesicles on patient's hand

Case

Case History

- 22-year-old African American female with history of atopic dermatitis, exercise-induced asthma, and anemia secondary to sickle cell trait, presented to the ED with worsening rash on her face, hands, arms and torso.
- She had been in the ED twice that week for progressive skin lesions associated with fever, and was referred by her primary care provider after seeing dermatology and ophthalmology.
- Her symptoms began 2 weeks prior with an atopic dermatitis flare. At the start of the flare she applied expired hydrocortisone cream which exacerbated her rash and caused a burning sensation. She developed painful perioral lesions, making it difficult to open her mouth or eat.

Clinical Exam

- Patient was febrile and tachycardic and ill-appearing.
- clusters of umbilicated vesiculopustules with hemorrhagic crusting around the mouth, eyelids and eyes, right side worse than left.
- eczematous changes behind both ears with honey-colored crusting, xerosis and umbilicated vesicles on her hands and arms, as well as scattered vesicles on her chest wall.

Diagnostic Tests

- Laboratory tests: elevated ESR; no leukocytosis
- Chest XRay was negative.
- Herpes/VZV PCR was positive and Herpes Simplex IgM Ab elevated.
- HIV 1&2 and coxsackie viral PCR negative. HSV 1&2 IgG negative.
- Wound cultures from the eye grew Staphylococcus aureus and wound culture from the face grew Staphylococcus aureus, Haemophilus haemolyticus, Alpha Hemolytic Strep, and coagulase-negative Staphylococcus that was sensitive to oxacillin.
- MRSA negative. Blood and urine cultures were negative.

Clinical Course

- Patient was admitted to General Medical Floor and Infectious Disease was consulted for expert opinion.
- She was treated with IV fluids, IV oxacillin and valacyclovir, as well as tobramycin eye drops and topical mupirocin ointment. Lesions crusted over and diminished in size and quantity over course of admission, and patient's oral intake improved.
- She was discharged home on PO valacyclovir and cefuroxime for total 14 day course with close follow-up with her primary care doctor, ophthalmologist and dermatologist.

Discussion

KVE is a rare HSV-related skin infection that occurs with preexisting atopic dermatitis; it manifests as rapidly spreading vesicular lesions with high rates of mortality if not treated. Less commonly, KVE is associated with psoriasis, Darier's disease, contact dermatitis and Hailey-Hailey disease.

Diagnosis is clinical but can be confirmed by viral DNA PCR from lesion fluid.

Oral acyclovir is a first line treatment and in severe cases IV acyclovir should be administered. Bacterial superinfection is a common complication of KVE and thus antibiotics are often a crucial aspect of treatment.

References

- Ferrari B., Talierco V., Luna P., Abad M.E., and Larralde M. Kaposi's varicelliform eruption: a case series. Indian Dermatol Online J 2015; 6: pp. 399-402
- Peng WM., Jenneck C., Bussmann C., Bogdanow M., Hart J., Leung DY., et al. Risk factors of atopic dermatitis for eczema herpeticum. J Invest Dermatol 2007; 127: 1261-3