Extended Abstract

Journal of Bacteriology and Infectious diseases

2020
Vol. 4, Iss. 1

10th International Congress on Clinical Virology, Fungal Infections & Infectious Diseases-December 04-05, 2017 Dubai, UAE-Kaposi varicelliform eruption: Analyses of clinical characteristics and predisposing factors

Woo-Haing Shim
Pusan National University, South Korea

Kaposi varicelliform eruption (KVE) is a widespread herpes simplex virus infection, mostly occurring in patients with atopic dermatitis (AD). There have been quite a few data on clinical characteristics and predisposing factors of KVE in Korea. The objective was to characterize the clinical features and predisposing factors for KVE. A retrospective analysis of the patients diagnosed with KVE at the Pusan National University Hospitals (Busan and Yangsan) from 2004 through 2017 was conducted. A total of 73 episodes occurred in 58 patients and of these, 11 patients had recurrence (18.9%). The most common pre-existing disease was atopic dermatitis (72.4%), followed by contact dermatitis (8.6%), Darier's disease (6.8%) and seborrheic dermatitis (6.8%). The age ranged from 4 months to 68 and the mean age at the diagnosis of KVE was 27.3 years. Face (91.3%) was the most common involved site, followed by trunk (39.6%), upper extremities (31.0%) and lower extremities (13.7%). Majority of the patients with KVE (74.0%, n=43) experienced aggravation of the underlying disease within 3 months of onset of KVE, and this was more prominent especially in patients with recurrent events than those with single episode (p=0.031).

Treatment of Kaposi varicelliform eruption must be instituted with no delay since it is a potentially life-threatening disease. Antiviral therapy is effective in reducing morbidity and preventing complications. Nucleoside analogs are the antiviral agents most commonly used since they inhibit viral DNA replication. Acyclovir is the most widely studied and prescribed drug for of Kaposi varicelliform eruption. High dose intravenous acyclovir is often necessary for disease control. Most patients achieve resolution of the skin lesions over several days. Prophylactic treatment with systemic antibiotics is recommended to prevent secondary bacterial infection. Kaposi varicelliform eruption is a serious condition that may have fatal outcomes. The disease may occur as a primary or a recurrent type of infection. The primary form mainly concerns children and is usually disseminated and associated with systemic symptoms and life-threatening complications such as bacterial sepsis, viremia, and multiple organ involvements. The recurrent type occurs in adulthood and is usually a milder and more localized form, generally presenting without viremia. Septicemia resulting from secondary bacterial infection of cutaneous lesions also increases the morbidity and the mortality The most common species isolated from patients with Kaposi varicelliform eruption are Staphylococcus aureus, group A beta-hemolytic streptococcus, Peptostreptococcus and Pseudomonas aeruginosa. Risk of ocular involvement exists when herpes simplex virus-associated Kaposi varicelliform eruption affects the face. Ocular anomalies include uveitis, conjunctivitis, keratitis, and blepharitis. The most serious ophthalmological sequela is herpetic keratitis which may lead to vision loss resulting from corneal scarring. Kaposi varicelliform eruption should be diagnosed accurately since it may have fulminant outcomes. Although there is no consensual therapeutic approach, the early use of antiviral therapy in association with systemic antibiotics is crucial. Kaposi varicelliform eruption may present to the primary care provider, nurse practitioner, emergency department physician or the internist; the most important thing is to refer these patients immediately to the dermatologist. The diagnosis is clinical but the general practitioner may not

Note: This work is partially presented at 10th International Congress on Clinical Virology, Fungal Infections & Infectious Diseases, December 04-05, 2017 Dubai, UAE

have the clinical expertise to make this diagnosis. If the eye is affected, an ophthalmology consult should be made Treatment of Kaposi varicelliform eruption must be instituted with no delay since it is a potentially life-threatening disease. Antiviral therapy is effective in reducing morbidity and preventing complications. Acyclovir is the most widely studied and prescribed drug for of Kaposi varicelliform eruption. High dose intravenous acyclovir is often necessary for disease control, so a pharmacist should have involvement to verify dosing and perform medication reconciliation. Most patients achieve resolution of the skin lesions over several days. Prophylactic treatment with systemic antibiotics is recommended to prevent secondary bacterial infection. Nursing will administer these drugs, and need to be aware of the signs of adverse drug reactions, as well as monitoring the progress fo treatment.

The patient's complete blood count revealed a white blood count of 4,640/µl (neutrophils 2,210/µl, lymphocytes 1,370/µl), hemoglobin of 13.0 g/dl, and platelet count of 79,000/µl presenting mild lymphopenia and thrombocytopenia. The C-reactive protein (CRP) was elevated at 85.8 mg/l (normal range, 0–8). The results of other laboratory studies, including routine biochemistry and chest X-rays, were normal. The CD4 and CD8 lymphocyte counts were 0.28 × 109/l and 0.64 × 109/l, respectively (CD4:CD8 ratio = 0.44). Serology for human immunodeficiency virus was negative. His serum IgM and IgG antibodies were negative for varicella-zoster virus. HSV type 1 and type 2 were also undetectable by polymerase chain reaction assay. A dermatologic clinical diagnosis of Kaposi's varicelliform eruption was made based on the patient's typical skin manifestations, including viral infection-like blisters and eruptions. The patient was intravenously administered 250 mg of acyclovir every 8 h. Twenty-four hours after initiation of treatment, there were no new vesicles, and the patient's clinical status improved. However, his fever did not completely resolve. We reconsulted the dermatologist, and skin biopsy was performed after 6 days of acyclovir. The biopsy showed interstitial granulomatous dermatitis with a few eosinophils, extravasated red blood cells and basal vacuolization. There was no evidence of herpetic viral infection in the biopsy specimen. The pathologic findings were suggestive of a granulomatous drug eruption. Therefore, we concluded that the patient had an everolimus-induced drug eruption manifesting as Kaposi's varicelliform eruption considering both clinical presentation and pathologic findings. After stopping everolimus, a follow-up bone scan of the patient revealed new spinal metastases involving the T3 and L1 vertebrae and a compression fracture of L3. He had palliative radiation therapy (42 Gy) of his thoracic and lumbar spine. Three months later, the patient died of disease progression of the metastatic RCC. The diagnosis of Kaposi's varicelliform eruption is mainly clinical. There are several tests that can be useful. A Tzanck smear can provide rapid diagnosis when it shows the characteristic epithelial multinucleated giant cells. Polymerase chain reaction assays can be used to detect a virus. Both biopsy and serology are of little diagnostic value, and these are not recommended as routine tests

Note: This work is partially presented at 10th International Congress on Clinical Virology, Fungal Infections & Infectious Diseases, December 04-05, 2017 Dubai, UAE