INTRODUCTION
Moritz Kaposi described the Kaposi's sarcoma (KS) in 1872. It is presently classified in 4 main classes: classic, endemic African, KS associated with AIDS, and iatrogenic immunosuppressive associated KS. Association of immunosuppression and KS is well established, especially after solid organ transplant or immunosuppressant therapy. Majority of these patients develop localised disease to skin with less likelihood of visceral involvement and respond to tapering doses of immunosuppressants. We report the occurrence of disseminated KS in a 70-year, HIV-negative man, known to have bronchial asthma, who self-medicated himself with steroids for over 20 years.

CASE REPORT
A 70-year man presented with multiple skin lesions of 3 years' duration. The lesions started on the right arm and progressed to involve arms, trunk, legs and the face over 3 months' period. More recently, the patient noted abdominal distension, weight loss, anorexia and nausea but declined for melena, hemetemesis or altered bowel habits. Co-morbid conditions included hypertension, diabetes mellitus and bronchial asthma. He was using angiotensin converting enzyme inhibitors, oral hypoglycemic agents, and inhalational β-agonists. In addition, he had been using beta-methasone injections for the past 20 years.

On examination, the patient had multiple red to violet lesions on arms, trunk and legs. These lesions varied from macules to papular eruptions. Nodular growths were seen over shoulders and tragus of the left ear. The pulse rate was 100/minute, regular, and the blood pressure was 90/50 mmHg, with a postural drop of 20/10 mmHg. He had barrel shaped chest with vesicular breathing and no added sounds. There were signs of proximal myopathy, more marked in the lower limbs.

Laboratory investigations revealed a high ESR (120 mm/after first hour), anemia (Hb= 8.4 g/dl) and normal leukocyte count (12.1 x 10⁹/l) with lymphopenia (1.1 x 10⁹/l). The CD4+ [0.258 x 10⁹/l (0.5-1.3)] and CD8+ [0.129 x 10⁹/l (0.3-1.0)] counts were low with normal ratio of 2.0. Renal and liver functions were normal. Glycosylated hemoglobin was high at 7.4%. Serology for HIV, human T-cell lymphotropic virus-1 and 2, and human herpes virus-8 (HHV8) were negative. Upper gastrointestinal endoscopy revealed multiple gastric lesions. Skin and gastric lesion biopsies established the diagnosis of disseminated Kaposi's sarcoma. Work-up for HIV, HTLV-1 and HHV-8 was negative. He had low lymphocytes and CD4 counts. He also had steroid-induced hypoadrenalism. Patient was treated with systemic chemotherapy due to visceral metastases to which he responded well and is in stable remission.

The skin biopsy showed a vasoformative, moderately pleomorphic spindle cell proliferation in the dermis. In the upper dermis, the cells were arranged parallel to the epidermis. In the mid dermis, they surrounded sweat glands. Variably-sized vascular spaces and red cell extravasations were present. There were glomeruloid vessels. The spindle cells stained positively with CD31 and CD34. The gastric biopsy showed an infiltrative spindle cell proliferation in the mucosa with similar morphological and immunophenotypic features as the skin biopsy. The spindle cells in the gastric biopsy were SMA, S100 and CD117 negative. At both sites, Ki-67 stain showed proliferative activity in about 5% of tumor cells. The features were consistent with Kaposi sarcoma (Figure 2).

Staging CT scan did not show any other visceral or nodal involvement. During the hospital stay, the patient was found to be persistently hypotensive. This led to further discussions with the patient, which revealed the history of self-medication with steroids. Suspicion of steroid induced hypoadrenalism was confirmed with low morning cortisol level (13 nmol/L, range 185-264 nmol/L) and inadequate response to short-acting synacthen test. Steroid replacement therapy led to symptomatic improvement. Subsequently, the patient was commenced on bi-weekly pegylated liposomal doxorubicin, and following 4 months of treatment, went in complete clinical remission. His steroids were tapered gradually and he has been on inhalers for asthma. His KS is in remission for more than 2 years now. The endoscopy after 2 months of chemotherapy showed no residual disease.

**DISCUSSION**

Patients with localized disease are treated with local therapies including surgery, radiotherapy or local chemotherapeutic agents. KS is commonly associated in organ transplant patients, secondary to long-term immunosuppressing agents. KS is a rare entity in patients who take steroids for non-immune-related disorders as few case reports/series are reported.1,5-8

HIV and HHV-8 are etiologic agents for KS, but this patient tested negative for both the viruses. He presented with disseminated disease, which is rare with steroid associated KS as visceral involvement is seldom reported. Steroids have been associated with latent viral infections,6 but that was also not found in this patient. There was no history of homosexual contact, which is considered a risk factor for developing KS in HIV negative patients.3

This patient is similar to one reported by Fierro et al.7 in regard to visceral involvement, but this patient has non-immune-related disease as compared to one reported by Fierro et al. This patient responded well to his chemotherapy and is in remission since 2 years, which also can be considered a rarity.7

**REFERENCES**


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