

Clinical Notes

An upsurge of new cases of Kaposi's sarcoma in Iraqi patients

Sir,

Kaposi's sarcoma (KS) is a multisystem vascular neoplasm characterized by mucocutaneous violaceous lesions and edema as well as involvement of nearly any organ such as the lung and gastrointestinal tract.¹ Kaposi's sarcoma is characterized by a complex histologic picture including numerous vascular spaces, perivascular and interstitial spindle-shaped cells, extravasated erythrocytes, lymphocytes, and plasma cells.² There are 5 types of KS with different presentation, epidemiology and prognosis.³ These include classical type, African cutaneous, African lymphadenopathic, acquired immunodeficiency syndrome associated and immunosuppression associated type.⁴ In the past decade we have observed an increase in the number of the cases of KS. Therefore, the aim of the present work is to report this disease and to evaluate the clinical and histopathological picture of the disease among Iraqi patients.

Twenty patients were seen in the outpatient clinic of the Department of Dermatology and Venereology of Baghdad Teaching Hospital, Baghdad, Iraq during the period from October 1999 to July 2001. Full history and physical examination were carried out for all patients and the following investigations were performed; complete blood picture and erythrocyte sedimentation rate, liver function test, renal function test, chest x-ray, ultrasound of the abdomen, anti human immunodeficiency virus (HIV) antibody titer, and hepatitis B surface antigen in addition to skin biopsies. The ages of patients ranged between 20-83 years with a mean \pm standard deviation (SD) of 54.3 ± 20.64 years, while their ages of onset ranged between 16-82 years with a mean \pm SD of 52.65 ± 20.94 years. The duration

of the disease ranged between one month to 7 years with a mean of 19.55 ± 23.36 months. Thirteen patients (65%) were males, and 7 patients (35%) were females with a ratio of 1.9:1. The geographical distribution of the patients was as follows: Four patients (20%) were from the south of Iraq, one patient (5%) was from the north of Iraq while the other 15 patients (75%) were from the middle of Iraq. The disease was not associated with occupation or drug intake, but one patient (5%) gave a history of blood transfusion 8 years before his illness, 2 patients (10%) were diabetic, 3 patients (15%) were hypertensives, one patient (5%) had liver cirrhosis and asthma and on steroids for many years. In one patient (5%) the disease was associated with psoriasis, and one patient (5%) had a lesion at the site of previous trauma (surgery). There was no similar condition in the same family in all of the patients. The disease was generally asymptomatic in 17 patients (85%) and only 3 patients (15%) presented with slight burning pain and slight itching. In 11 patients (55%) the rash consisted of multiple nodules and plaques of well defined border, bluish-red to deep brown in color, affecting both extremities and to a lesser extent the trunk. In 9 patients (45%) the lesions were multiple nodules or papules affecting the trunk, face as well as the penis (shaft and glans penis) (**Figure 1**). In 15 patients (75%) the site of predilection was mainly the extremities (legs, feet, forearm, and hands) and to a lesser extent the trunk and face, in 5 patients (25%). Palpable lymph nodes were detected in 2 patients (10%), mainly in the groin. Their sizes ranged between 1.5 cm to 2 cm in diameter and their consistencies were rubbery, non-mobile and not tender. Mucous membrane involvement was noted in 2 patients (10%) as a single macule or papules on the hard palate and the cheek (**Figure 2**) or as an ulcerative lesion on the tongue. Only five patients (25%) had multiple opacities in the lung and the liver observed on chest x-ray and abdominal ultrasound, which gave a suspicion of visceral involvement and 3 of these patients later died.



Figure 1 - A plaque stage affecting the inner side of the upper thigh and the genital area.



Figure 2 - Multiple nodules affecting the oral mucosa.

The mortality rate was 15%. The results of complete blood picture and blood chemistries were within normal limits. Anti-HIV titer was negative in all patients including those with more extensive disease and those with mucous membrane involvement. In 2 patients (10%) the titer of hepatitis B surface antigen was positive, and only one of them had liver cirrhosis. The histopathological findings of the patients differed according to the morphology of the skin lesions. No patient was received in the patch stage because of the late presentation of the disease. The plaque stage was seen in 11 patients (55%). Consisting of multiple dilated spaces throughout the dermis with endothelial proliferation and extravasation of red blood cells. Fascicles of spindle cells were also present between dilated blood vessels. The inflammatory infiltrate was composed mainly of mononuclear cells. The epidermis showed slight or no changes. The nodular stage was seen in 9 patients (45%). It showed diffuse infiltrate of blood vessels and spindle cells that may replace the dermal collagen. The inflammatory infiltrate is sparse and significantly lesser than that in the plaque stage.

Kaposi's sarcoma occurs worldwide, affecting all races and is approximately twice as common in men as women.¹ Although some previous studies revealed a very high male to female ratio (15:1) nevertheless, many recent studies revealed a male to female ratio of 2:1.4 The present work showed almost similar results to that reported in previous literature with a ratio of 2:1. In our study, no family history was reported. In addition, this study has shown no association with patient's occupation, or with drug intake; however, there was one patient who gave a history of blood transfusion before 8 years, 2 diabetic patients, 3 patients with hypertension, and one patient with liver cirrhosis and asthma on steroids for many years. These associations may be explained partly due to immune compromisation as in the case of the patient using steroids. The present work showed an age incidence between 20-83 with predilection for middle aged and elderly patients. This fact is almost consistent with the literature.¹ The mean age of patients with classical KS was reported to be approximately 68 years but in our study the mean age was lower (54.3 ± 20.64 years). The clinical picture and morphology of the skin lesions in patients with KS in the present study was comparable to previous publications. Regarding the clinical presentation, it was found that 55% of the patients presented with nodules and plaques; while in 45% of the patients their lesions were multiple nodules or papules. While in the literature it was stated that most patients presented with bluish-red macules or patches, the present work showed that the majority of our patients were lately presented because of misdiagnosis. Concerning the site of

involvement, the present study revealed that 75% of the patients had their lesions on the extremities; while 25% of the patients had their lesion on the trunk, face and shaft and glans penis. As shown in these results, it is almost consistent with many previous reports.³ Regarding the site of predilections or onset of lesion, the disease mostly started acraly, as similarly shown in this study. Mucosal involvement was detected in (10%) of the cases in the form of macules or papules on the hard palate and ulcerative lesions on tongue, similar to previous reports. In this study we report for the first time the development of KS at the site of injury; the patient was followed-up and died after receiving treatment. The histological features of different types of skin lesions in this study were similar to previous descriptions.² These results were generally comparable to that previously published in Iraq from 1974-1984.⁵ However, the striking difference is the great increase in the number of the cases. In a previous study, 21 patients were seen in a period of 10 years, while the present study recorded 20 patients in one year in the same center. This increase in the frequency of the cases can not be explained, but one can speculate that the environmental change in the late decade might be attributed as a cause.

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