CASE REPORT

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DISSEMINATED ENDEMIC KAPOSI'S SARCOMA IN A YOUNG MAN WITHOUT EVIDENCE OF HIV INFECTION.

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ABSTRACT

We report a case of disseminated endemic Kaposi's sarcoma in an HIV- negative young man, involving the head, face, eye, tongue, upper and lower limbs, trunk, glans penis and peripheral lymphadenopathy. Tests for human immunodeficiency virus were negative. The clinical and histologic features with absence of immunosuppressive drugs in patient history confirmed the African endemic Kaposi's sarcoma. To the best of our knowledge this might be the first case reported in this part of the world.

KEYWORDS: Disseminated, Endemic, Kaposi's sarcoma, HIV-negative.

INTRODUCTION

In 1872, Moritz Kaposi, a Hungarian dermatologist, described odd skin tumors in five men in their sixth and seventh decades of life as "idiopathic multiple pigmented sarcoma of the skin (1)." There are five subtypes of Kaposi's sarcoma which include: 1) classic; 2) endemic African cutaneous; 3) endemic African lymphadenopathic; 4) acquired immunodeficiency virus-associated; and 5) those associated with immunosuppressive therapy. Although it is not understood, epidemiologic and biologic evidence has suggested that the pathogenesis of classic Kaposi's sarcoma involves the transmission of an infectious viral agent such as human herpes virus 8 or some other unique agent that is transmitted independently (2,3).

The most common form that is associated with Acquired Immunodeficiency Syndrome has been well documented since first described in the early 1980's (4). This form appears in up to 40% of AIDS patients and may account for up to 90% of all cancers found in the AIDS population (5). The African type, primarily

found in regions of equatorial Africa, is a much more common entity within its geographic setting, with findings of up to 9% of all malignancies in eastern Zaire (6). While usually less severe than the AIDS-associated condition, the African-type is the only form known to regularly occur in children (6). African-Endemic Kaposi sarcoma is the second most prevalent malignancy in Africa representing about 10% of all malignancies (7).

We report a young man with aggressive Kaposi sarcoma with no evidence of HIV infection.

CASE REPORT

A 30-year-old male farmer presented with a history of progressively asymptomatic multiple skin nodules on the left lower limb and face of 10 months duration. This is followed shortly by similar lesions on the ipsilateral leg and foot, forehead, face, right eye, right hand, glans penis and tongue. No associated itching or preceding history of trauma. No past history of immunosuppressive therapy. Significant peripheral

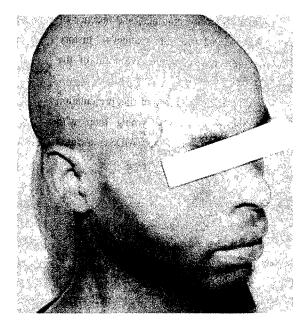
lymphdenopathy (cervical and inguinal), oedema of the left lower limb (fig.1and 2) were observed. Chest, cardiovascular, abdominal and central nervous system examinations were essentially normal. A complete blood count and metabolic profile were within normal with the exception of mild normochromic anaemia (Packed Cell Volume=30%), Scanning of abdomen and pelvis did not show any abnormality. Biopsy of one of the skin nodules (fig. 2) showed Kaposi's sarcoma (fig. 3). The patient was screened for HIV by the following tests. Table I.

Table I. Tests for HIV infection

KIT NAME	Types of test	DESIGNED TO DETECT	RESULT
DETERMINE	RAPID IMMUNO-	ANTIBODIES TO	NEGATIVE
	CHROMATOGRAPHY	HIV-1 AND HIV-2	
			Negative
CAPILLUS	RAPID AGGLUTINATION	ANTIBODIES TO HIV-1 AND	
		HIV-2	{
		ANTIBODIES TO	NEGATIVE
Genie II	RAPID IMMUNO-	HIV-1 AND HIV-2	
	CHROMATOGRAPHY		
		ANTIBODIES TO	NEGATIVE
Oraquick	RAPID IMMUNO-	HIV-1	
	CHROMATOGRAPHY		
		ANTIGEN P24 OF	NEGATIVE
GENSCREEN	ENZYME - LINKED	HIV-1, ANTIBODIES	
	IMMUNOSORBENT ASSAY	TO HIV-1 GROUPS	
		M AND O, AND	
		ANTIBODIES TO	
		HIV-2	
	IMMUNOBLOT (WESTERN	ANTIBODIES TO SPECIFIC	Negative(no visible
NEW LOVBLOT 1	BLOT)	HIV-1 ANTIGENS	BAND)
		HIV-1 RNA	
	NUCLEIC ACID		NEGATIVE (VIRAL
AMPLICOR HIV-1	AMPLIFICATION		RNA NOT DETECTED)
MONITOR			

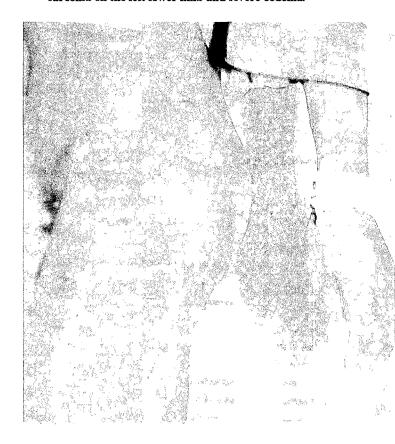
LEGEND 1

Photograph showing multiple nodules of Kaposi's sarcoma on the head and face.



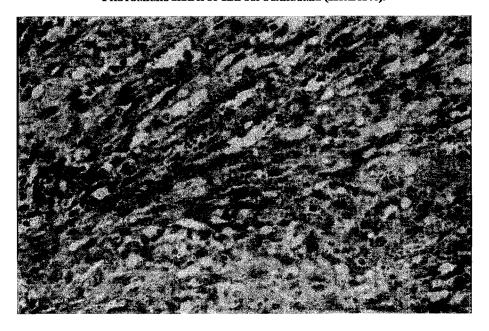
LEGEND 2

Photograph showing multiple nodules of Kaposi's sarcoma on the left lower limb and severe oedema.



LEGEND 3

Photomicrograph of Kaposi's sarcoma. (H&E X40).



DISCUSSION

The pattern of AIDS-associated Kaposi sarcoma favours the lower extremities that are similar to the classical type. However, in our previous study, we reported aggressive KS in AIDS patients with multiple lesions on the body (8). This patient also presented with features of aggressive KS but was HIV-negative with the various tests of HIV at our center, table I Esu-Williams et al (9) carried out a study on the distribution of 330 seropositives patients and found 314 (95.2%) for HIV-1 group M, 1 (0.3%) for HIV-1 group O, 3 (0.9%) for HIV-2 and 12 (3.6%) for dual HIV-1 and HIV-2. This patient had similar tests to rule out HIV-1 group O that may be HIV negative by other routine tests.

The presentation of this patient is widespread Kaposi sarcoma involving the head and face, right eye (conjunctiva), tongue, right hand, left leg, glans penis and cervical and inguinal lymph nodes. The short course of this disease and wide spread of the lesions made it aggressive. In contrast to classic Kaposi sarcoma, which evolves very slowly and runs a benign course, even in the face of extracutaneous disease (10), the African endemic lymphadenopathic Kaposi sarcoma affects mainly children (6). This patient is a young man (30 years), which is also in contrast to the classic KS that was seen in elderly (older than 60 years).

Kendrich et al (11) reported a similar case of widespread Kaposi's sarcoma in an elderly HIV-negative African-American. In the same center, Kagu et al (12) also reported a case of African Endemic Kaposi Sarcoma involving only the lower extremity in a 62-year-old farmer. Both types of African KS typically affect the lower extremities with the cutaneous type comprising 90% of cases (7).

The histological features of classic KS are not different from other forms of the disease (2). The short course of disease, and clinical features in our patient led to diagnosis of aggressive KS, with a negative HIV serology, normal laboratory findings, and absence of immunosuppressive drugs in patient's history confirmed the diagnosis of aggressive form of the disease.

In conclusion, the importance of this presentation is that of a negative-HIV young man with aggressive KS as seen in AIDS-associated Kaposi's sarcoma patients.

REFERENCES

- Zachariades, N., and Hatjiolou, E.: Kaposi's sarcoma: then and now: nodular lesion of the palate as the only manifestation of the disease in a 70 year old heterosexual woman. Revue de Stomatologie et deChirurgie Maxillofaciale. 1988; 89: 106-108.
- Hong A, Lee CS. Kaposi's sarcoma: clinico pathological analysis of human immunodeficiency virus (HIV) and non-HIV associated cases. Pathol Oncol Res. 2002; 8:31-35.
- Touloumi G, Hatzakis A, Potouridou I, et al. The role of immunosuppression and immuneactivation in classic Kaposi's sarcoma. Int J Cancer. 1999;82:817-821.
- Hymes, K.B., Cheung, T., Greene, J.B., et al: Kaposi's sarcoma in homosexual men. *Lancet*. 1981; 2: 598-600.
- Piette, W. W.: The incidence of second malignancies in subsets of Kaposi's Sarcoma. Journal of the American Academy of Dermatology . 1987; 16: 855-861.
- Wahman, A., Melnick, S.L., Rhame, F.S., and Potter, J.D.: The epidemiology of Classic, African and Immunosuppressed Kaposi's sarcoma. Epidemiol Rev. 1991; 13: 178-197.
- Ziegler JL, Templeton JC, Vogel CL et al. Kaposi's sarcoma: a comparison of classical,

- endemic, and epidemic forms. Smin Oncol 1984; 11:47-52.
- Khalil MI, Nggada HA, Harry TO, Anjorin CO. Manifestations of aggressive atypical Kaposi sarcoma (AAKS) in HIV disease patient seen in Maiduguri, North Eastern Nigeria. African Journal of Clinical and Experimental Microbiology 2004; 5(1): 46-54.
- Esu-Williams E, Mulanga-Kabeya C, Harry T, et al. Seroprevalence of HIV-1, HIV-2, and HIV-1 group O in Nigeria: Evidence for a growing increase in HIV infection. J. AIDS Human Retroviral 1997; 16: 204-210.
- 10. Ron IG, Kuten A, Wigler N, et al. Classical disseminated Kaposi's sarcoma in HIV-negative patients: an unusually indolent subtype. Br J Cancer. 1993; 68:775-776.
- Kendrich CG, Brown RA. Wide spread Kaposi's sarcoma in an HIV-negative man. SKINmed 2004;3(20); 108-109.
- Kagu MB, Nggada HA, Tahir B. Monotherapy of African endemic Kaposi's sarcoma with vincristine infusion: A case report. BOMJ 2004; 1(2): 31-32.

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