

MEETING ABSTRACTS

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Clinical presentation and outcome of epidemic Kaposi sarcoma in Ugandan children

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Background

Kaposi sarcoma (KS) is one of the most common pediatric cancers in sub-Saharan Africa. Few data are available about the clinical presentation or response to treatment of children with epidemic (HIV-associated) KS.

Methods

Medical records of all children with KS and HIV infection referred to the Uganda Cancer Institute from October 2004 to June 2007 were reviewed. Charts were abstracted for age, sex, location of KS lesions, biopsy results, CD4 T-cell counts, and KS treatment and outcome. (Table 1)

Those children with lymphadenopathic KS were younger (mean difference 3.7 years; $p = 0.01$), and had higher CD4 T-cell counts (mean difference 242 cells/ μ L; $p = 0.03$) than those without lymph node involvement.

CD4 T-cell count was not associated with KS presentations other than lymph node involvement (Figure 1).

Twenty children (62.5%) of the 32 patients with outcome data available had a complete resolution of KS. Eleven patients had a partial response, and only one patient had a documented lack of response. No association was apparent between outcome and age, sex, or type of KS presentation. Thirty (93.8%) of the 32 patients with outcome data available received cancer chemotherapy (10 with vincristine, 20 with vincristine plus bleomycin). No difference was observed in outcome with respect to whether cancer chemotherapy was used, or whether one or two drugs were given. Of those patients with a known outcome, a higher proportion had a complete resolution of KS among those who received any antiretroviral therapy (ART) regimen compared to those who did not receive ART (19 of 26 vs. 1 of 6; $P=0.02$).

Table 1

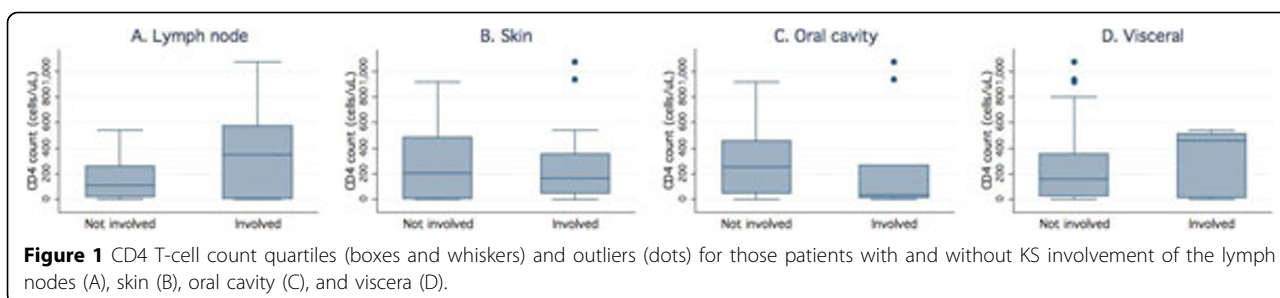
	Total	Males	Females
KS cases, n (percent)	73 (100%)	37 (50.7%)	36 (49.3%)
Age in years, median (range), n=56	10.1 (2 – 18)	9.3 (2 – 16)	11.0 (2 – 18)
CD4 T-cells/ μ L, median (IQR) n=36	210 (21 – 482)	165 (16 – 538)	263 (26 – 464)
Location of lesions n=42*			
Skin involvement	20 (47.6%)	10 (45.5%)	10 (50.0%)
Oral cavity involvement	9 (21.4%)	4 (20.0%)	5 (22.7%)
Viscera involvement	5 (11.9%)	3 (15.0%)	2 (9.1%)
Lymph node involvement	25 (59.5%)	11 (55.0%)	14 (58.3%)

*Categories of lesion location not mutually exclusive.

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Conclusions

Compared to skin involvement, lymph node involvement of epidemic KS occurs at younger ages and at higher CD4 levels. This presentation may reflect recent infection with human herpesvirus 8 followed by a rapid progression to malignancy. Favorable response to treatment was observed in some cases, but the observed response rate was almost certainly biased by the large number of children lost to followup, among whom we expect disproportionately poor outcomes. Prospective studies are needed to determine optimal management.

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