Tumwine et al. Infectious Agents and Cancer 2010, 5(Suppl 1):A39
http://www.infectagentscancer.com/content/5/S1/A39

INFECTIOUS AGENTS AND CANCER

MEETING ABSTRACTS Open Access

Immunohistochemically confirmed HHV-8-related lymphoproliferative disorders in Uganda

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From 12th International Conference on Malignancies in AIDS and Other Acquired Immunodeficiencies (ICMAOI)
Bethesda, MD, USA. 26-27 April, 2010

Background

Human herpesvirus-8 (HHV-8) infection is endemic in Uganda and has an estimated 36%-60% seroprevalence. This virus is in the oropharynx and peripheral blood of Ugandans with Kaposi's sarcoma, and viremia is increased in those with HIV-1. While Kaposi's sarcoma is widely recognized as both endemic and with HIV epidemic, HHV-8 associated lymphoproliferative disorders have not been previously reported in Uganda. Evidence for these disorders was sought in lymphoma surveys conducted by sub-Saharan African Lymphoma Consortium (SSALC) consortium members in Uganda.

Materials and methods

Samples of 456 malignant lymphoma and adenopathy cases in formalin-fixed paraffin-embedded (FFPE) blocks from the Uganda SSALC and the Uganda AIDS and Cancer Specimen Resource (ACSR) were examined for morphology and Lana-1 (immunohistochemical, IHC) for diagnosis of HHV-8 lymphoproliferative disorders. Samples were also tested (IHC and in situ hybridization, ISH) using 20 monoclonal antibodies for common NHL antigens, ISH for EBV-encoded RNA, and kappa/lambda light chains (ISH, Ventana, Tucson).

Results

Many but not all of reported HHV-8-related proliferative disorders were identified in this sample population. Those identified and remaining to be identified are listed in Table 1.

Conclusions

HHV-8 proliferative disorders excluding Kaposi's sarcoma are present but generally not recognized by

Table 1 Subtypes

Subtype			N
Castleman's disease	Unicentric varieties	Hyaline vascular variant	2
	Multicentric varieties	Plasma cell variant	1
		Plasmablastic variant	1
		Lymphocyte depleted	1
Plasmablastic lymphoma (HHV-8 negative and positive)			2
Primary effusion lymphoma			
Peripheral T-cell lymphoma			
Diffuse large B-cell lymphoma			
Plasmacytic lymphoproliferative disorder			1
Total			8

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Ugandan clinicians and pathologists. Disorders are present in Uganda, especially in HIV-positive patients, in association with the high infection rates of both HIV-1 and HHV-8. Recognition is important because HHV-8 infection in HIV-1-positive patients associates with poor prognosis. Familiarity with the clinical presentation and tissue morphology of these disorders will likely result in recognition of the full range of reported HHV-8 proliferative complications. HHV-8-related lymphoma has increased prevalence in the HIV-1 infected. It arises and progresses in the face of highly active antiretroviral therapy immune reconstitution, making recognition of these disorders critical to patient care. We participate in the Sub-Saharan Africa Lymphoma Consortium [http://www.ssalc.org] to expand the understanding of HIV/AIDS-related malignancies and viral proliferative disorders in this region of the world.

Acknowledgements
This article has been published as part of *Infectious Agents and Cancer* Volume 5 Supplement 1, 2010: Proceedings of the 12th International Conference on Malignancies in AIDS and Other Acquired Immunodeficiencies (ICMAOI). The full contents of the supplement are available online at http://www.biomedcentral.com/1750-9378/5?issue=S1.

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Published: 11 October 2010

doi:10.1186/1750-9378-5-S1-A39
Cite this article as: Tumwine *et al.*: Immunohistochemically confirmed HHV-8-related lymphoproliferative disorders in Uganda. *Infectious Agents and Cancer* 2010 **5**(Suppl 1):A39.

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