

MEETING ABSTRACTS

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# Malignant lymphoma subgroups from Zaria, Nigeria, reveal absence of HIV/AIDS-related plasmablastic lymphomas and HHV-8-related lymphoproliferative disorders

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## Background

Prevalence of non-Hodgkin's lymphoma (NHL) subgroups throughout Africa, particularly among persons with HIV/AIDS, is unknown but increases in Burkitt lymphoma, plasmablastic lymphoma, and HHV-8 proliferation disorders have been noted. SSALC, an AIDS and Cancer Specimen Resource (ACSR/NCI) project, seeks to define indigenous sub-Saharan NHL subtypes using WHO classification (2008). Omoti (Univ. Benin 2007) defined an overall malignant lymphoma (ML) rate: 13.4/100,000 (1990s) including 17% Hodgkin's disease and

83% NHL but subgroups were not defined. Because regional HIV/AIDS prevalence is high, we subgrouped NHL and reviewed lymph node hyperplasia using stored material from Ahmadu Bello University Teaching Hospital in Zaria, Nigeria, to look for HIV/AIDS-associated lymphoid malignancies.

## Materials and methods

Fifty-seven paraffin blocks were used to construct a tissue microarray (TMA), and whole tissue sections were H&E stained for morphology. TMA sections were stained

**Table 1 Cases by diagnostic subgroup**

Subgroups		N	%NHL			
ML	NHL	Burkitt lymphoma	19	51		
		Lymphoblastic lymphoma: (pre-B)	1	3		
		Angioimmunoblastic T-cell lymphoma	1	3		
		Follicular lymphoma	6	16		
		Marginal zone lymphoma	1	3		
		Lymphoma not otherwise specified (NOS)	2	5		
		B-cell lymphoma, EBV+	Activated B cell	1	3	
				Diffuse large B-cell lymphoma	4	11
				NOS	1	3
		Hodgkin's disease	Malignant infiltrate (HHV-8 negative)	1	3	
5						
Reactive/normal tissue		15				
<b>Total</b>		<b>57</b>				

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using 30 monoclonal antibodies for common NHL antigens and Lana-1 for HHV-8 (immunohistochemical, IHC); in situ hybridization (ISH) for EBV-encoded RNA, kappa/lambda light chains (Ventana, Tucson, AZ), and fluorescent in situ hybridization (FISH) c-myc t(8;14) (Abbott/Vysis, Downer's Grove, IL).

## Results

There were 43 ML and 14 hyperplastic lymph nodes or reactive tissues. One lymph node was suspected for Castleman's disease but Lana-1 was negative. Table 1 lists ML subgroups.

## Conclusions

Subgrouping ML with Hodgkin's disease (12%) and NHL (88%) is similar to the 2007 report from nearby Benin University. Burkitt lymphoma was the most common NHL at 51% followed by follicular lymphoma 16% and diffuse large B-cell lymphomas 14%. With the exception of Burkitt lymphoma, which is endemic in Nigeria, other NHL commonly associated with HIV/AIDS such as plasmablastic lymphoma and HHV-8 lymphoproliferative disorders were not identified.

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