

POSTER PRESENTATION

Open Access

HIV/AIDS-related non-Hodgkin's lymphomas and confounders: preliminary report of the Sub-Saharan Africa Lymphoma Consortium (SSALC)

Leona W Ayers^{1*}, E Akin Abayomi², Clement Adebamowo³, David K Chumba⁴, Yawale Iliyasu⁵, Kikkeri N Naresh⁶, Joseph R NDung'u⁷, Yvonne Perne⁸, Wendy Stevens⁹, Lynnette K Tumwine¹⁰

From 13th International Conference on Malignancies in AIDS and Other Acquired Immunodeficiencies (ICMAOI)

Bethesda, MD, USA. 7-8 November 2011

Background

SSALC was established to characterize HIV/AIDS-related lymphoma and the indigenous background of malignant lymphomas (ML) in sub-Saharan Africa. Because WHO classified lymphoma subgroups can vary in prevalence African, Asian or European ancestry, we surveyed lymphoma heterogeneity in geographically diverse East, South and West sub-Saharan populations, particularly for HIV/AIDS associated immunophenotypes.

Methods

A consortium of African pathologists, hematologist/oncologists and oncologic surgeons contributed ML cases and participated in sub-grouping according to WHO classification criteria after appropriate Institutional Review Board (IRB) approvals, Memoranda of Understanding and Material Transfer Agreements were obtained. Paraffin blocks were examined for tissue morphology (H&E), immunophenotype (34 antibodies IHC), EBER, *kappa* and *lambda* light chains (CISH) and c-myc and bcl2 translocations (FISH). HIV/AIDS diversity controls were contributed from Europe by consortium and USA by ACSR.

Results

Consortium members contributed 46 - 368 cases each with 1408 total cases to date: 246 diffuse large B-cell lymphoma (DLBCL), 296 Burkitt lymphoma, 163 Hodgkin disease, 69 plasma cell proliferative disorders and 644 others. Aggressive DLBCL, plasmacytoma/plasmablastic

lymphoma, KSHV disease and lymphoid hyperplasia will be highlighted.

Conclusions

Sub-Saharan Africa has a variety of ML subgroups; true incidence altered by: 1) Aspiration vs. biopsy for diagnosis; 2) HIV status not communicated to pathologist; 3) known HIV/AIDS patients not biopsied; 4) initial diagnosis by morphology alone, 5) tissue preservation/processing variable.. General observations: HIV/AIDS-related lymphoma is more likely EBER+, has higher cell proliferation rates, and unfavorable immunophenotypes; regions differ in HIV clades with South (clade C) having the most "immunosuppression" associated lymphoma subgroups; East region has more pre-T lymphoblastic lymphomas and West region has more follicular lymphomas. Confounders: infectious lymphadenopathies (EBV+ lymphoproliferations), undifferentiated neuroblastomas, neuroectodermal tumors (PNETs), poorly differentiated, metastatic carcinomas and malignant melanoma (amelanotic).

Acknowledgement

AIDS and Cancer Specimen Resource (ACSR) NCI U01-CA66531-s Sub-Saharan Africa Lymphoma Consortium (SSALC).

Author details

¹The Ohio State University Department of Pathology, Columbus, OH, USA. ²Stellenbosch University Division of Haematology, Cape Town, South Africa. ³Institute of Human Virology, Abuja, Nigeria; University of Maryland School of Medicine, Baltimore, MD, USA. ⁴Moi University Department of Human Pathology and Forensic Medicine, Eldoret, Kenya. ⁵Ahmadu Bello University Teaching Hospital Department of Pathology, Zaria, Nigeria. ⁶Imperial College Department of Medicine, London, England, United Kingdom. ⁷University of Nairobi Department of Pathology, Nairobi, Kenya. ⁸University of the Witwatersrand School of Pathology, Division of Anatomical Pathology, National Health Laboratory Service, Johannesburg, South Africa.

* Correspondence: leona.ayers@osumc.edu

¹The Ohio State University Department of Pathology, Columbus, OH, USA
Full list of author information is available at the end of the article

⁹University of the Witwatersrand School of Pathology, Division of Molecular Medicine and Haematology, National Health Laboratory Service, Johannesburg, South Africa. ¹⁰Makerere University Department of Pathology, Kampala, Uganda.

Published: 19 April 2012

doi:10.1186/1750-9378-7-S1-P11

Cite this article as: Ayers *et al.*: HIV/AIDS-related non-Hodgkin's lymphomas and confounders: preliminary report of the Sub-Saharan Africa Lymphoma Consortium (SSALC). *Infectious Agents and Cancer* 2012 **7**(Suppl 1):P11.

**Submit your next manuscript to BioMed Central
and take full advantage of:**

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

Submit your manuscript at
www.biomedcentral.com/submit

