Histopathology 1983, 7, 549–559

Carl Lund

Robert D. Collins

Robert J. Lukes

Concordance of the Kiel and Lukes–Collins classifications of non-Hodgkin's lymphomas

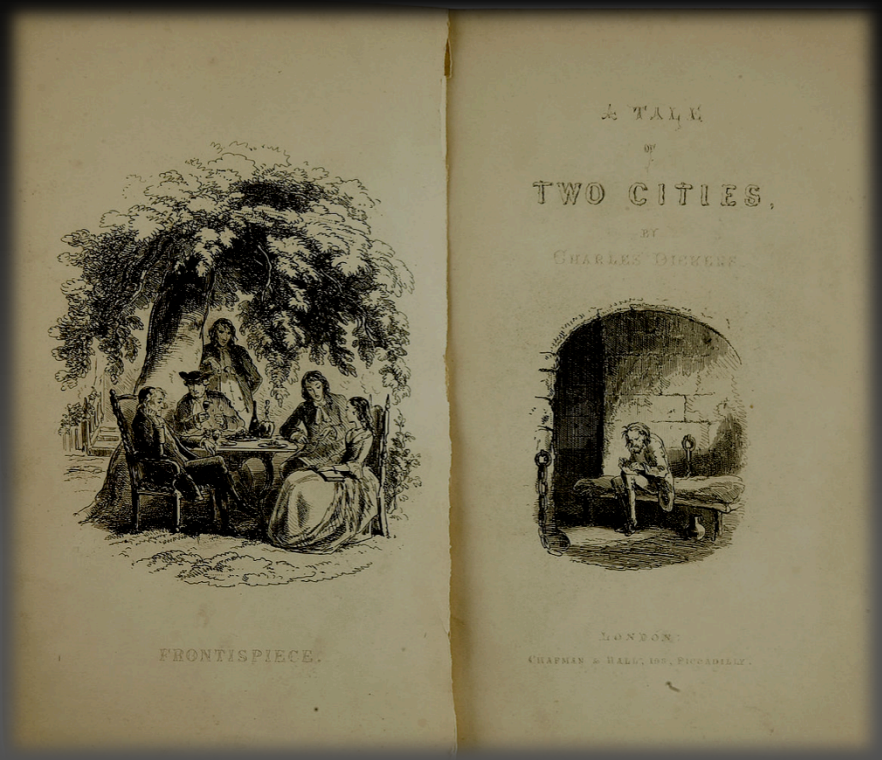
K. Lennert

Obituary – Professor Dr. Robert J. Lukes

Ann Hematol (1995) 71:103-

From 1972 on, Dr. Lukes and his colleague Dr. Robert Collins shared a basic idea with the Kiel group, namely that of deriving malignant lymphomas from the immunologically defined types of lymphocytes. Thus the so-called Lukes-Collins classification and the Kiel classification evolved simultaneously, the latter introduced by the European Lymphoma Club.

The 1970's were very exciting but tumultuous times – not everyone was on the same page!



"It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness…."

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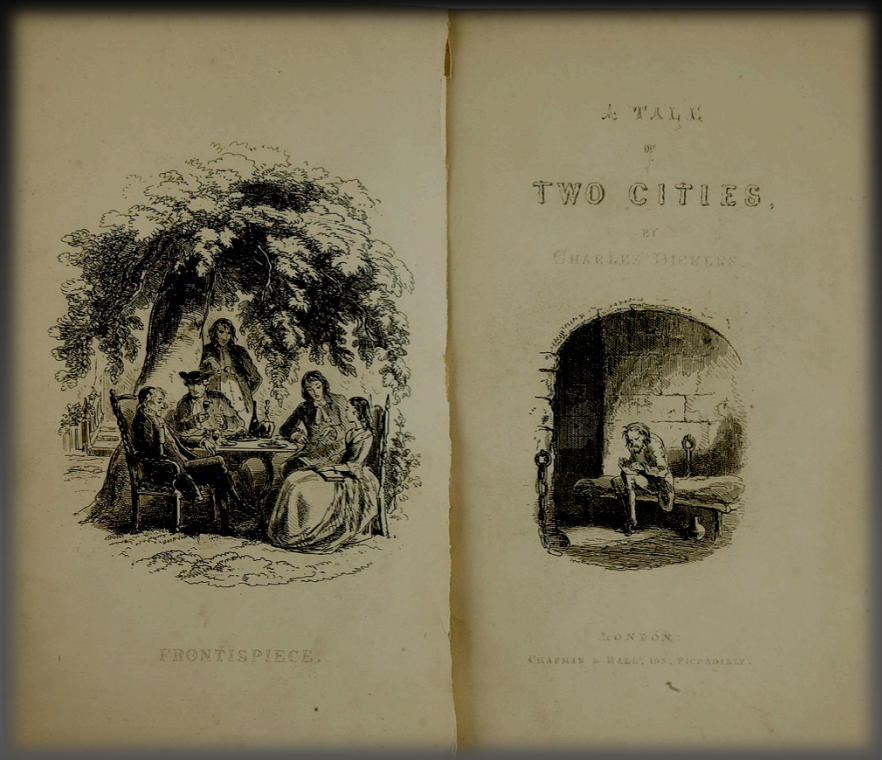

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CLASSIFICATION OF NON-HODGKIN'S LYMPHOMAS

SIR,—The announcement in *The Lancet* (Aug. 17, pp. 405–408) of two more classifications of non-Hodgkin's lymphomas encourages me to put forward my classification of these classifications:

Well-defined, high-grade, oligosyllabic

Poorly differentiated, polysyllabic
- diffuse
- circumlocutory
- with dyslexogenesis

Unicentric
- derivative
- neologistic

Multicentric, cycnophilic (Gk. κυκνος = swan)

Cleaved and convoluted types
- Rappaport (non-Lukes)
- Lukes (non-Rappaport)

This system makes no claim to be comprehensive or even comprehensible, so there may well be scope for other classifications of classifications and ultimately, one hopes, a classification of classifications of classifications. At that point we shall need a conference in the Caribbean.

Royal Marsden Hospital,
Fulham Road,
London SW3 6JJ.

H. E. M. KAY.

Lancet
1974
7;2(7880):
586

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TECHNOLOGY • ENTERTAINMENT • SCIENCE

HISTORICAL EVENTS • POLITICAL FIGURES • LIFESTYLES • ART • SPORTS

1980s

CELEBRATE THE CENTURY®

Space Shuttle Launched, Berlin Wall Falls

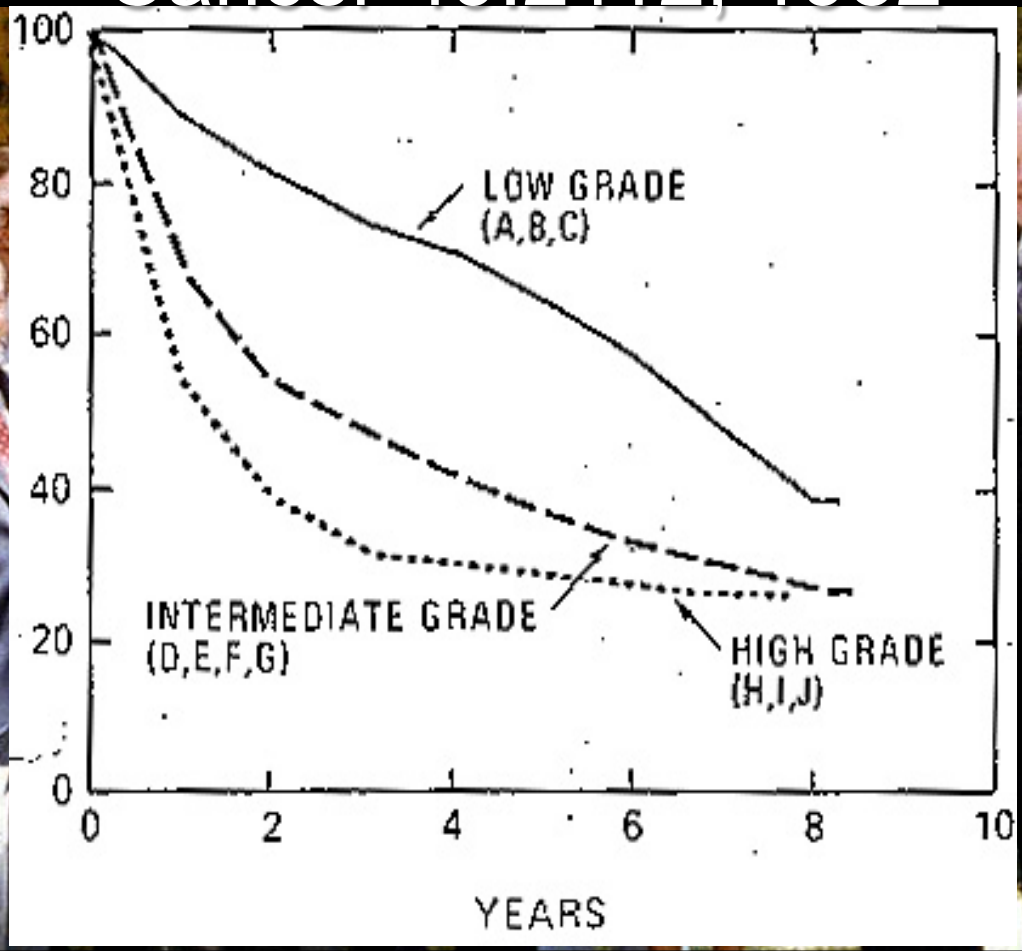
The space shuttle Columbia, the first reusable spacecraft, was originally launched April 12, 1981. Sandra Day O'Connor became the first female justice on the U.S. Supreme Court, and Sally Ride became the first American woman in space. The Iran-Contra hearings made headlines. Several events signaled the easing of international tensions. In December 1987 President Ronald Reagan and Soviet leader Mikhail Gorbachev signed a nuclear arms reduction treaty. The fall of the Berlin Wall in November 1989 presaged the end of the Cold War. The Vietnam Veterans Memorial was dedicated November 13, 1982. A new national holiday, Martin Luther King Day, was first celebrated in January 1986.

The growth of cable television, video games, and compact discs had a major impact on home entertainment. *Dallas* and *The Cosby Show* topped TV ratings. Hip-hop culture and music videos gained popularity.

New Words: yuppie, informercial, biodiversity

NCI Working Formulation

Cancer 49:2112, 1982



Morphologic classification based in large part on survival data from the late 1970s.

Some felt the Working Formulation was dead on arrival while others rallied behind it, but with growing perceptions of a continental divide, other classifications aging, and the need for an up-to-date biologically meaningful & clinically useful classification, …..

Enter the International Lymphoma Study Group (ILSG)

PERSPECTIVE

A Revised European-American Classification of Lymphoid Neoplasms: A Proposal From the International Lymphoma Study Group

By Nancy Lee Harris, Elaine S. Jaffe, Harald Stein, Peter M. Banks, John K.C. Chan, Michael L. Cleary, Georges Delsol, Christine De Wolf-Peeters, Brunangelo Falini, Kevin C. Gatter, Thomas M. Grogan, Peter G. Isaacson, Daniel M. Knowles, David Y. Mason, Hans-Konrad Muller-Hermelink, Stefano A. Pileri, Miguel A. Piris, Elisabeth Ralfkiaer, and Roger A. Warnke

THE HISTOLOGIC categorization of lymphoma has been a source of frustration for many years for both clinicians and pathologists. In the last 10 years, much new information has become available about the lymphomas, resulting in recognition of new entities and refinement of previously recognized disease categories, [illegible] of whether it is time for a new lymph[illegible] classi[illegible]ation. [illegible] this paper we report the result of an inter[illegible]tiona[illegible] review [illegible] lymphomas, which we hope may clarify [illegible] of [illegible] sion surrounding this topic.

This review was conducted at a meeting of 19 [illegible]pathologists with particular interest and experience in lymphomas (the International Lymphoma Study Group) in Berlin, Germany, in April 1993. At previous meetings in Europe and the United States, we had come to believe that, despite the variety of classification schemes used, many hematopathologists appeared to agree on a rather large number of distinct lymphoma entities that they recognize and diagnose in daily practice. We believed that we could pro[illegible] service to both pathologists and clinicians struggl[illegible]g with the classification of lymphomas by attempting to a[illegible]ve at a consensus regarding the categories of lymphoid [illegible]oplasia that can be reliably recognized at present.

What emerged from this meeting was, first, that each of us had independently evolved ways of viewing these diseases that were essentially identical. Surprisingly, there was little divergence between European and US participants. Second, it was evident that, while many of these lymphoma entities are recog[illegible] Classification[illegible]llins Classific[illegible]on,[7] and the [illegible]rking Formu[illegible]on,[8] they often go by diffe[illegible] names in [illegible]erent publica[illegible]s and may have variable [illegible]nosis.[9] Further[illegible] that [illegible]

understanding lymphomas and suggest important new lines of research, our current understanding of both the immune system and the lymphomas appears to be inadequate to support a biologically "correct" lymphoma classification. Thus, a classification strictly based on a theoretical relationship of [illegible] to norm[illegible] stages of differentiation is both unrealistic and [illegible] for the practical categorization of human lymp[illegible]mas.

[illegible] conclude that the most practical approach to lymp[illegible] categ[illegible]zation at this time is simply to define the [illegible]ses that we think [illegible] can recognize with the currently available morphologic, immunologic, and genetic techniques.[10] Thus, a lymphoma classification becomes simply a list of well-defined, "real" disease entities. Many of these entities are associated with distinctive clinical presentations and natural histories, even though treatment options may be limited. Cases that do not fit into one of these defined entities are best left unclassified, reflecting the fact that we do not yet understand everything about lymphomas or the immune system.

[illegible] we summarize the entities agreed on at the meeting, giving the major defining histologic, immunologic, an[illegible] features, their clinical presentations and course, and postulated normal counterpart in the immune system. It is obviously impossible in this space to cover all diseases completely, and more detailed descriptions of most of these entities are available in the literature. Thus, we have focused [illegible]

1994:
The
R.E.A.L.
classification

Table 1. List of Lymphoid Neoplasms Recognized by the International Lymphoma Study Group

B-Cell Neoplasms
I. Precursor B-cell neoplasm: Precursor B-lymphoblastic leukemia/lymphoma
II. Peripheral B-cell neoplasms
1. B-cell chronic lymphocytic leukemia/prolymphocytic leukemia/small lymphocytic lymphoma
2. Lymphoplasmacytoid lymphoma/immunocytoma
3. Mantle cell lymphoma
4. Follicle center lymphoma, follicular
Provisional cytologic grades: I (small cell), II (mixed small and large cell), III (large cell)
Provisional subtype: diffuse, predominantly small cell type
5. Marginal zone B-cell lymphoma
Extranodal (MALT-type +/− monocytoid B cells)
Provisional subtype: Nodal (+/− monocytoid B cells)
6. Provisional entity: Splenic marginal zone lymphoma (+/− villous lymphocytes)
7. Hairy cell leukemia
8. Plasmacytoma/plasma cell myeloma
9. Diffuse Large B-cell lymphoma*
Subtype: Primary mediastinal (thymic) B-cell lymphoma
10. Burkitt's lymphoma
11. Provisional entity: High-grade B-cell lymphoma, Burkitt-like*

T-Cell and Putative NK-Cell Neoplasms
I. Precursor T-cell neoplasm: Precursor T-lymphoblastic lymphoma/leukemia
II. Peripheral T-cell and NK-cell neoplasms
1. T-cell chronic lymphocytic leukemia/prolymphocytic leukemia
2. Large granular lymphocyte leukemia (LGL)
T-cell type
NK-cell type
3. Mycosis fungoides/Sezary syndrome
4. Peripheral T-cell lymphomas, unspecified*
Provisional cytologic categories: medium-sized cell, mixed medium and large cell, large cell, lymphoepithelioid cell
Provisional subtype: Hepatosplenic $\gamma\delta$ T-cell lymphoma
Provisional subtype: Subcutaneous panniculitic T-cell lymphoma
5. Angioimmunoblastic T-cell lymphoma (AILD)
6. Angiocentric lymphoma
7. Intestinal T-cell lymphoma (+/− enteropathy associated)
8. Adult T-cell lymphoma/leukemia (ATL/L)
9. Anaplastic large cell lymphoma (ALCL), CD30+, T- and null-cell types
10. Provisional entity: Anaplastic large-cell lymphoma, Hodgkin's-like

Hodgkin's Disease
I. Lymphocyte predominance
II. Nodular sclerosis
III. Mixed cellularity
IV. Lymphocyte depletion
VI. Provisional entity: Lymphocyte-rich classical HD

* These categories are thought likely to include more than one disease entity.