Classification of Lymphoid Neoplasms Between the Hematopathologists and the "Common Person"

To the Editor:

It is not the purpose of this letter to reiterate Dr Rosenberg's comment in his editorial in Blood that "a clinico-pathologic classification must be clinically useful . . . reproducible by average well-trained pathologists, using easily available and easily learned techniques, and predict clinical behavior"; this seems to be a common sense. Nor is it within the scope of any short letter to discuss in detail or even briefly the list of 28 types of lymphoid neoplasms included in the revised European-American classifications of lymphoid neoplasms (REAL classification). However, being a hematopathologist who has trained many "average pathologists" in different parts of the world, I could not resist the urge to respond to Dr Rosenberg's invitation and make a few comments about the REAL classification.

This classification, as well as the Kiel classification, seems to have relied heavily on Giemsa rather than H and E stains. As many pathologists and histotechnologists know, a good Giemsa stain is not "easily learned," to say the least. I have the feeling that most "average well-trained pathologists" agree that an internationally usable classification of lymphoid neoplasms must be based on hematoxylin and eosin stain morphology.

As Dr Rosenberg noted, the advanced immunostains and techniques may not be available in many centers throughout the world, or the tissue could have been fixed in formalin immediately, rendering it unsuitable for detailed immunologic studies. Any useful classification should include generic designations using H and E stains that can be subclassified by the more sophisticated immunologic or cytogenetic studies, if possible. These generic designations are not only useful for pathologists who practice in centers or countries where sophisticated techniques are not available, but can also serve for preliminary reports, even in advanced institutions, or as general categories for clinical management. These facts are well born out in the working formulation.

Another word of caution: one of the major pitfalls of Rappaport's classification was the use of functional designations as "histiocytic" without solid evidence from morphology. I believe that such functional designations should be avoided unless they are supported by morphologic findings. A more recent example is the diffuse centrocytic lymphoma of the Kiel classification, which turned out to be mostly a mantle cell lymphoma rather than a follicular center lymphoma. I believe that terms like diffuse follicular center lymphoma, mantle cell lymphoma (the diffuse variant), marginal zone lymphoma, splenic marginal zone lymphoma, and even the B- and T-cell subclassifications originally proposed by Lukes and Collins, are in many situations functional rather than morphologic designations. These designations may then change with time as much...
as those of histiocytic or centrocytic changed within less than a decade. Another still more recent example is the lymphomatoid granulomatosis, which is generally accepted even, at least in part, by the REAL classification as T-cell lymphoma, which was lately recognized as T-cell rich B-cell proliferation. Any durable classification must be based on morphologic features to start.

Eponyms as Burkitt’s lymphoma may be used together with their morphologic designations. A childhood small noncleaved lymphoma in endemic areas, eg, can be Burkitt’s or non-Burkitt’s as the REAL authors have noted. However, in my experience, there are minor but real differences in behavior and response to chemotherapy between the two. I feel that non-Burkitt’s lymphoma, as well as a Burkitt’s lymphoma, which may not be quite typical because of the nature of the tissue submitted or for technical reasons, eg, should have a general designation as they do in the Working Formulation.

I tend to agree with Dr Rosenberg that a modified working formulation can better serve to translate between the language of the common person, a general pathologist, or an oncologist on one hand, and that of the hematopathologist on the other hand. As for a pathologist like me, and probably many others, I must keep my loyalty to both sides! A report of mine may read as follows: “malignant lymphoma, non-Hodgkin’s, small lymphocytic, low grade” or “malignant lymphoma, non-Hodgkin’s, small B lymphocytic, low grade,” according to the availability of immunologic studies. Another example is as follows: “malignant lymphoma, immunoblastic, high grade, apparently arising in a low-grade small cleaved or centrocytoid diffuse non-Hodgkin’s lymphoma, consistent with MALT lymphoma.” Then I may detail the immunophytic subtypes if they are available.

In the end, I would like to congratulate the authors for the excellent and comprehensive revision of the lymphoid neoplasms. I am sure that this classification will be extremely useful in academic and specialized institutions. I feel confident that because of this effort, an additional simpler formulation for day-to-day use will be forthcoming in the near future.

Tahseen Al-Saleem
Department of Pathology
Fox Chase Cancer Center
Philadelphia, PA

REFERENCES
Classification of lymphoid neoplasms between the hematopathologists and the "common person" [letter; comment]

T al-Saleem