

versus diffuse large B-cell lymphoma: a practical approach

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Abstract:

Burkitt Lymphoma (BL) is listed in the World Health Organization (WHO) classification of lymphoid tumours as an "aggressive B-cell non-Hodgkin's lymphoma", characterized by a high degree of proliferation of the malignant cells and deregulation of the c-MYC gene. The main diagnostic challenge in BL is to distinguish it from diffuse large B-cell lymphoma (DLBCL). While in children BL and DLBCL types probably do not differ clinically, and the differential diagnosis between BL and DLBCL may theoretically appear clear-cut, in adults daily practice shows the existence of cases that have morphological features, immunophenotypic and cytogenetics intermediate between DLBCL and BL, and cannot be classified with certainty in these categories. Distinguishing between BL and DLBCL is critical, as the two diseases require different management. This review summarizes the current practical approach, including the use of a large panel of antibodies, and cytogenetic and molecular diagnostic techniques, to distinguish between BL, DLBCL and the provisional category of "B-cell lymphoma, unclassifiable, with features intermediate between diffuse large B-cell lymphoma and Burkitt lymphoma", now listed in the updated WHO classification.