

366 DIFFUSE LARGE B-CELL LYMPHOMAS OF THE WALDEYER'S RING: A CLINICO-PATHOLOGICAL STUDY OF 209 PATIENTS FROM THE GROUPE D'ETUDE DES LYMPHOMES DE L'ADULTE (GELA)

Laurence de Leval^{1,5}, C. Bonnet^{2,5}, C. Copie-Bergman^{4,5}, L. Seidel³, M. Baia⁴, J. Brière⁴, T. Molina⁵, B. Fabiani⁵, B. Falini⁵, C. Gisselbrecht⁵, H. Thilly⁵, A. Albert³, G. Fillet^{2,5}, Philippe Gaulard^{4,5}

Departments of Pathology¹ Hematology², Biostatistics³, CHU Sart-Tilman, Liège, Belgium; Department of Pathology, Hôpital Henri Mondor⁴, Créteil, France; GELA group⁵

DLBCLs are markedly heterogeneous, and their biological features may vary according to the primary site of disease. The WR is the second most common site of extranodal involvement by DLBCL.

We analyzed 209 adult patients with *de novo* DLBCL presenting in the WR consecutively included in the GELA trials (1993-2004) (M/F: 1,8; mean age 59 yrs; 81% stages I-II) and treated with anthracyclin-based polychemotherapy. Morphology and immunophenotype were analyzed and correlated to the clinical features. FISH assays with split-signal DNA probes were performed on a subset of cases. Survival and outcome were compared to a matched cohort primary nodal DLBCL patients.

By morphology, 55% of WR DLBCLs were centroblastic, 39% centroblastic-polymorphous, 3% immunoblastic, and 3% unclassifiable. Among large biopsy specimens (n=79), 53% had a prominent or minor nodular pattern and 47% were purely diffuse. The prevalence of antigen expression was: bcl2: 105/189 (60%); CD10:

75/178 (42%); bcl6: 40/76 (53%); mum-1:40/109 (37%). The immunophenotype of 136 cases was GC-like in 60% and non-GC-like in 40%. In multivariate analysis, GC-like cases correlated with better OS (p=0.014). Rearrangement of *BCL-2*, *BCL6* and *c-MYC* loci were found by FISH in 3/42, 9/35 and 3/41 cases. For 144 paired WR nodal cases, the CR rate was significantly better for WR patients (p=0.01) but the 5-y OS and EFS rates (79,7% and 70,9% in WR patients, and 76,7% and 66,7% in nodal patients) did not significantly differ. For 109 paired patients with no adverse prognostic factor of the aa IPI, primary WR localization was associated with a higher 5-y EFS (78,5% vs. 71,2%; p=0,029) and OS (84,7% vs. 79,8%; p=0,047) rates.

In conclusion, WR DLBCLs frequently have a partially follicular pattern of growth, and a GC-like phenotype. In DLBCL patients with an aa IPI = 0, the WR localization appears to confer a better outcome than primary nodal involvement.