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 (GEILA)

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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 GEILA trials (1995-2004) (M/F: 1.8; mean age 59 yrs; 81% stage
I-II) and treated with anthracycline-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-
polytypic, 3% immunoblastic, and 3% undifferentiable. Among large biopsy
specimens (n=79), 55% had a prominent or minor nodular pattern and 47% were
purely diffuse. The prevalence of antigen expression was: bcl2: 105/189 (56%); CD10:
75/178 (42%); bcl6: 40/76 (53%); zimun-1:60/109 (57%). 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=0.04). Rearrangement of BCL-2, MCL1 and
c-MYC loci were found by FISH in 34/3, 2/5 and 3/41 cases. For 164 paired WR/
primary nodal cases, the CR rate was significantly better for WR patients (p=0.01) but the 5-y
OS and EFS rates (79.6% 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 an EFS, 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 an EFS = 0, the WR localization
appears to confer a better outcome than primary nodal involvement.