

Leukaemia Section

Short Communication

Centroblastic lymphoma

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Clinics and pathology

Disease

Centroblastic lymphoma is one of 3 morphologic variants of diffuse large B cell lymphoma (DLBCL). The other 2 variants are Immunoblastic lymphoma and anaplastic B-cell lymphoma.

The disease is not recognized as a separate entity in the WHO classification (2008).

Phenotype/cell stem origin

The postulated normal counterpart is a germinal centre B cell or an activated post germinal centre B cell.

The immunophenotype may help distinguishing germinal centre-derived DLBCL from activated B-cell derived DLBCL, the former being CD10+ (>30% of the cells), or BCL6+ and IRF4/MUM1-.

The immunophenotype reproduces that of DLBCL, with pan B-cell markers positive, surface and/or cytoplasmic Ig positive in the majority of the cases. The CD30 antigen is negative. CD5 is positive in 10% of the cases. CD10 is expressed in approximately half of the cases.

Epidemiology

It is the most common morphologic variant of DLBCL.

Clinics

The disease runs an aggressive course, as all DLBCL.

Pathology

The lymph node section shows an overwhelming infiltrate by medium-to-large size cells with vesicular nuclei and membrane bound nucleoli. The cytoplasm is scanty. In the majority of cases centroblasts are admixed with immunoblasts (<90%).

Treatment

Chemoimmunotherapy using anti CD20 monoclonal antibody rituximab in combination with CHOP or CHOP-like regimens is the standard of care.

Prognosis

Chemoimmunotherapy may cure 40-60% of the cases depending on age and risk factors.

Cytogenetics

Cytogenetics molecular

Because the distinction from other morphologic variants of DLBCL is not reproducible it is generally accepted that there are no distinctive cytogenetic or molecular features with respect to diffuse large B-cell lymphoma.

However, some authors described a more frequent occurrence of the t(14;18) than in immunoblastic lymphoma (Schlegelberger et al., 1999).

References

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