P2:103

Diffuse Large B-Cell Lymphoma Presented as Bone Lesions. A study of cases

Irena Boulytcheva[1], Nikolay Kushlinskiy[2], Yuriy Soloviev[3], Mamed Aliev[2]

[1)] N.N.Blokchin's Central Research Oncology [2)] N.N.Blokchin's Center [3)] N.N.Blochin's Center, Russian Federation

Irena V. Boulytcheva ., Nicolay E. Kushlinskiy.,Yuriy N. Soloviev., Mamed D. Aliev.

N.N.Blokhin Cancer Research Center, Moscow, Russian Federation

Introduction: Diffuse large B-cell lymphoma is the most common lymphoma worldwide. Both morphologically and prognostically it represents a diverse spectrum of disease. Primary bone lymphoma is suggested when the patient remains free of extraskeletal disease for 6 months after diagnosis. Primary B-cell lymphomas has been lately classified as 3 distinct subtypes, which reflect different stages of B-cell differentiation.
Materials and Methods : Twenty-eight patients with primary diffuse large B-cell lymphoma of bone were studied. The tumors were subclassified according to the criteria of the WHO standards and evaluated by immunohistochemistry . The spectrum of antigens including bcl-6, CD10, MUM-1, CD 138, bcl-2 (DAKO corporation) helps to investigate the possible relationship of PBDLBCL of bone to stages of normal B-cell differentiation.This review focuses solely on de novo DLBCL presenting with bone involvement without evidence of extraskeletal disease.
Results and Conclusions We report a series of 28 primary bone lymphoma cases with female predominance (10/18), the median age of the patients (48,2), the femur was the most common site of involvement and axial skeleton the second most common location. Most tumors were centroblastic, or centroblastic with multilobated nuclei (20/71%). The majority of tumors (17/62%) were bcl-6 positive, and 15/53% of cases coexpressed CD10. The combination of positive CD10 and bcl-6 markers is currently widely accepted as an immunophenotypic signature for germinal center (GC) –like phenotype. The absence of both markers, 10/37% of cases , were interpreted as indicative of a post germinal center phenotype. The coexpression of MUM-1 and bcl-6, that is exclusive in normal GC B-cells, has been reported in 9/29% of the cases and possibly suggests a late stage of GC differentiation for those MUM1+ cases.
Several clinical studies indicate that patients with primary bone lymphomas have a favorable prognosis. Overall, the outcome in CD10 and bcl-6 positive cases after combined modality therapy was better, than in other groups of the patients. Most tumors showed neither morphologic nor phenotypic evidence for plasmacytic differentiation, suggesting a biologic difference from plasma cell tumors of bone. The expression of CD10 was associated with improved survival.

E-mail (main author): irena@boulytcheva.com