1698

CLINICOPATHOLOGIC CHARACTERISTICS OF THE T(14;19)(Q32;Q13)-POSITIV SPLENIC MARGINAL ZONE LYMPHOMA

H. Julhakyan,[1] T. Obukhova,[2] A. Kremenetskaya,[2] E. Zvonkov,[2] I. Kaplanskaya,[2] A. Vorobiev[2]

[1]Hematology research center, MOSCOW, Russian Federation; [2]Hematological Research Center, MOSCOW, Russian Federation

Background. Splenic marginal zone lymphoma (SMZL) is well recognized B-cell neoplasm. Which characterized with splenomegaly, lymphocytosis, involvement of bone marrow, sometimes with M-component. Immunologically characterized with typical phenotype of marginal zone. The most frequent findings in SMZL are involvement of chromosomes 1, 3, 7(usually deleted in 7q) and 8. The t(14;19)(q32;q13) is rare cytogenetic abnormality with rearrangement bcl-3 that has been reported in B-cell lymphomas and leukemia. *Aims*.To describe the clinical, morphological, immunophenotypic findings in SMZL associated with t(14;19)(q32;q13). *Design and Methods*. In Hematological Research Centre, Moscow between January 2005 and February 2009 identified three cases SMZL with t(14;19)(q32;q13). In all patients (males with median age 58 years (from 51-67)) debut of lymphoma with B-symptoms, high level of lactate dehydrogenase (LDH), hepatosplenomegaly and only with splenic hilar lymphadenopaty. The median hemoglobin was 110 g/l (range 92-122 g/l). All patients had normal count of leucocytes with an absolute lymphocytosis (median lymphocytes count 72,3 x 10^9 g/l, range 58-83x10^9/L) and thrombocytopenia. Morphological examination of peripheral blood and bone marrow lymphocytes showed that all lymphocytes are atypical with wide cytoplasm, nuclear indentation. In all cases bone marrow involvement was nodular and composed of heterogeneous mixture cells, majority medium sized. The results of immunophenotypic analysis were expression of mature B-cells antigens and absence CD10-, CD23-, CD5-, CD43-, CyclinD1-. In debut two patients were get chemotherapy (CHOP-regimen) However there were progression - enlargement of spleen size and decreased of thrombocytes counts. All patients undergo to splenectomy. Median weight of spleen was 2083 g (range 1800-2850 g). Splenic section generally show massive nodular pattern (involvement of the white and red pulp) associated with diffuse invasion of the sinuses. In all cases discovered high Ki-67. There were occur progression after splenectomy during 3-6 months which is characterized with increase of leucocytes counts (range 45,4 - 101,8x10^9 /l), high level of LDH, appearance of peripheral and visceral lymph nodes. Consideration of increasing leucocytes count and presence of lymphadenopathy in all patients were used alkylating agents (in one patient - chlorambucil and in two - cyclophosphamide). Results: There were normal peripheral blood index and level of LDH, absence of lymphadenopathy in all cases after 4-6 months of treatment with alkylating agents. Median observation was 13+ months (range 15-18 months). All patients were alive. *Conclusions*. t(14;19)(q32;q13)-positive SMZL is distinct variantof SMZL which characterized with high Ki-67, transient progression on chemotherapy and after splenectomy and high efficiency of alkylating agents.

1699

MYELOID PRECURSOR THERAPY IN LYMPHOMA PATIENTS

Zs. Miltenyi,[1] A. Illes,[2] Zs. Simon,[1] L. Gergely,[1] L. Varoczy,[1] E. Payer[1]

[1]University of Debrecen, DEBRECEN, Hungary; [2]3rd Department of Internal Medicine, DEBRECEN, Hungary

Background. Myeloid growth factors help to prevent and cure neutropenic events in malignant lymphoma patients treated by chemotherapeutical regimens. Administering either filgrastim or pegfilgrastim, treatment schedule can be kept well and less dose reductions are needed, which results in better survival rates. *Aims*. The aim of this study was to examine the indications and the outcome of myeloid precursor therapy among our malignant lymphoma patients. *Design and Methods*. Between 2003 and 2007, 249 malignant lymphoma patients received 1655 cycles of different polychemotherapies. Myeloid growth factor therapy was administered in 138 cases by 65 patients, which meant 8.33% of all treatment cycles and 26.1% of all patients, respectively. As for the indications, prevention was more common than intervention (71.7% vs. 28.3%). By preventive usage of growths factors, two third of threatening neutropenic events could be avoided. Side effects were uncommon and mild: grade I-II toxicity was observed in 31% of all treatments. Analyzing the risk factors for febrile neutropenia among patients who received myeloid growth factor therapy compared to those who did not, we found the incidence of comorbidities, hypoalbuminaemia, advanced stage disease and agressive chemotherapies significantly different in the two groups. Interestingly, there was no significant difference between the median age and the incidence of low body surface area. *Conclusions*. Our observations support that myeloid precursor therapy is an effective and safe tool to prevent or treat neutropenia in high-risk malignant lymphoma patients.

1700

IMPROVEMENT OF THE OUTCOME OF DLBC AND FOLLICULAR LYMPHOMAS IN VENEZUELAN PATIENTS TREATED WITH R-CHOP

A. Müller,[1] M. Morales,[1] M.A. Torres,[2] G. Acquatella,[1] E. Tovar,[1] A. Soyano,[3] A.E. Soyano,[4] M. Di Stefano,[5] M. Villegas[1]

[1]Institute of Hematology and Oncology, CARACAS, Venezuela; [1]Clínica Santa Sofía, CARACAS, Venezuela; [3]Venezuelan Institute for Scientific Research, CARACAS, Venezuela; [4]Clínica Ávila, CARACAS, Venezuela; [5]Hospital Clínicas Caracas, CARACAS, Venezuela

A study of patients with lymphoma studied and treated at the Oncology and Hematology Institute (THE LYMPHOMA GROUP) in Caracas, and at other Public and Private Clinics in Venezuela was performed. *Design and Methods*. 1117 patients with lymphoma were studied during the period 1996-2008. The diagnosis of lymphoma was established by lymph node and tissue biopsies (depending of the case), histopathology and inmunohistochemistry studies, and complemented with X rays and TACs. Results: Most of the patients had non-Hodgkin lymphomas (NHL, 727 cases, 65.1%); the Hodgkin lymphomas represented 34.9% (HL, 390 cases), distributed as follows: Nodular Sclerosis (62.6%), Mixed Cellularity (27.7%), Lymphocyte Predominance (4.3%), patients with Lymphocyte Depletion (5.4%). The average age and gender of the patients were Nodular Sclerosis: 32.45 years old (18-65), 129 females and 115 males, Mixed Cellularity: 22.3 years (18-56), 37 females and 72 males, Lymphocyte Predominance 22.6 years old (18-67), 6 females and 11 males, Lymphocyte Depletion 22 years old (20-42) 15 males and 6 females. Stadio I: 5.5%, II: 44%, III: 31.1%, IV: 19.4%. These patients were treated with different protocols according to the year they were treated: MOPP, ABVD, STANDFORD V, HYBRIDO, COPP/ABVD, COPP/EBVD, and since 2004 with BEACOPP. Non Hodgkin Lymphomas (NHL) were distributed as follows: diffuse large B cell (36,4%), follicular (24,1%), MALT lymphoma (10%), Peripheral T cell (5,5%), Mantle Cell lymphoma (3%); 20,8% of the patients had another type of lymphoma such as mycosis fungoides, immunoblastic, anaplastic, Lymphoblastic, Burkitt or Cutaneous B cell lymphoma. Of the Follicular NHL 45% had high FLIPP, while 60% of the DLBC lymphoma had intermediate high IPI score with high risk prognostic factors and only 15% of cases had low risk lymphoma. They were treated with CHOP, CHOP Bleo, MACOB B, ATT, HyperCvad, CHOP MTX and since 2004 with R-CHOP. The R-CHOP as induction in Follicular NHL *de novo* and Rituximab as maintenance produced 46% CR and 56% PR. The CR increased to 77% after two years of Rituximab maintenance during four years observation period. The CR for DLBC lymphoma was 68%. An improvement in the outcome of our lymphoma patients has occurred when we compared the percentage of relapse in different years. *Conclusions*. 1117 Venezuelan patients with lymphoma were studied: 34.9% Hodgkin and 65.1% non Hodgkin lymphomas. The most common subtype of HL was nodular sclerosis (62.6%), being more common in female and young adults. The mixed cellularity HL represented 27.7%, while the lymphocyte predominance and lymphocyte depletion types were only 6,8% and 8,7%, respectively. The most common NHL was the DLBC lymphoma, followed by the follicular lymphoma. The Venezuelan population are integrated by a mixture of different ethnic group: Indians, Caucasians and Blacks but it seems that HL in these patients follows the same pattern reported in other populations. The outcome of Follicular and DLBC lymphoma patients improved using R-CHOP.