9211 POSTER

Tumour Infiltrating T-cells Predict Survival in Mantle Cell Lymphoma − an Immunohistochemical Study of 81 Patients

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Background: The role of tumour infiltrating T-Cells in malignant B-Cell lymphomas is discussed controversial. There are only limited data on CD 8 and FOXP3 positive cells in mantle cell lymphoma.
Material and Methods: 81 biopsy specimens of patients (64 men and 17 women) with mantle cell lymphoma and a median age of 64 years (range: 41 to 86 years) were included in this study. The slides were stained immunohistochemically with CD3, CD8 and FOXP3. Positive T-cells of 10 High power fields (HPF) were counted and the average value was calculated.
Results: The CD 8 staining showed a range of 0 to 138 positive cells per HPF with a mean value of 19.4/HPF. A high account of CD 8 positive cells was associated with a significantly longer overall survival time (42 months) compared to MCL with a low account of CD 8 positive cells (28.8 months, $p = 0.029$). FOXP3 staining had a range of 0 to 104/HPF with a mean value of 28. Patients with MCL and a high number (>25/HPF) of FOXP3 positive cells had a median survival time of 38.2 months compared with the group with low account (<20/HPF) of FOXP3 positive cells (23 months). Kaplan Meier analysis revealed a significant difference ($P = 0.015$) in overall survival time.
Conclusions: High number of CD 8 and FOXP 3 T-Cells predicts a superior clinical outcome in patients with mantle cell lymphoma.

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Account of Tumour Infiltrating Macrophages is a Prognostic Factor for Patients With Mantle Cell Lymphoma

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Background: Mantle cell lymphoma (MCL) is a malignant lymphoma associated with a relatively aggressive clinical course and a median overall survival time of 3−4 years. Only limited data about tumour associated macrophages and their influence on survival in MCL exists.
Material and Methods: We analyzed the amount of CD68 macrophages in relation to the clinical outcome in patients with MCL. Lymph node biopsies of 77 untreated patients (17 women and 60 men) enrolled in two multicenter trials (1975–1985) with a median age of 66 years (range 41−86 years) were included in this study. Biopsy specimens were investigated immunohistochemically with monoclonal antibodies against CD68 (Ki-M1P). 10 High power fields (HPF) were evaluated by random.
Results: Patients with low account (less than 10/HPF) of CD 68 positive macrophages had a median overall survival time of 38.2 months, compared to 24.2 months for patients with high (more 10/HPF) CD 68 positive macrophages. The Kaplan–Meier analysis showed a significant difference in the overall survival time ($p = 0.0027$).
Conclusions: Patients with mantle cell lymphoma and a low number of CD 68 positive macrophages have a better prognosis and can predict outcome.

9213 POSTER

Apoptosis Regulating Proteins P53, Caspase 3, and Bcl2 Can Predict Survival in Mantle Cell Lymphoma

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Background: The deregulation of apoptosis has been implicated in cancer, autoimmunity and degenerative disorders. At the molecular level an extrinsic death receptor pathway and the intrinsic (mitochondrial) pathway have been described. Only limited data exist on the expression of proteins involved in apoptotic pathways in mantle cell lymphoma.
Material and Methods: We investigated the expression of p53, the indicator of DNA damage of proteins involved in the regulation of the intrinsic mitochondrial pathway (BCL2, Bax) and of effector proteins of apoptosis (caspase 8, caspase 3) in 93 cases of mantle cell lymphoma and correlated the expression with the clinical outcome.
Results: Similar to previous studies, we found that p53 expression was associated with shorter overall survival. In contrast to diffuse large B-cell lymphomas, cases expressing the anti-apoptotic protein BCL2 had a favorable outcome. Interestingly, high levels of apoptosis in the tumour before treatment, as indicated by expression of active caspase 3, are a strong indicator of poor clinical outcome ($p < 0.001$).
Conclusions: These data indicate that the level of apoptosis itself is a strong prognostic marker in mantle cell lymphomas.

9214 POSTER

Effect of Methylation of P15INK4B Gene in Acute Lymphoblastic Leukemia and its Prognostic Value

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Background: An early diagnosis is critical for the successful treatment of many types of cancer. The traditional methods of diagnosis are useful, but molecular markers can further subclassify the tumours. The methylation profile can distinguish tumour types and subtypes and perhaps the response to chemotherapeutic agents and survival. Methylation changes often precede apparent malignant changes and thus may be of use in early diagnosis of cancer. The aim of the present work was to study frequency of p15 silencing in childhood and adult ALL patients. Also, to evaluate the prognostic value of p15 methylation in ALL.
Material and Methods: This study was conducted on 36 newly diagnosed patients with Acute lymphoblastic Leukemia (ALL) (25 B-ALL, 11 T-ALL) attending the Hematology Unit of Ain Shams University Hospitals. A group of 15 apparently normal healthy children and adults of matched age and sex were also included. Methylation specific-PCR for assessment of methylation status of p15 in peripheral blood lymphocytes was done.
Results: The results of this study showed that p15 methylation was found in 83.3% of the studied patients. This result indicate that methylation of p15 is a common phenomenon in ALL. Also our results found that the mortality rate and relapse were higher among patients with p15 methylation while none of the unmethylated patients died or developed relapse.
Conclusions: This suggests that p15 methylation profile may have important prognostic implications for clinical monitoring and risk assessment of ALL patients. Prospective knowledge of pretreatment methylation may help determine candidate patients for demethylating therapies.

9215 POSTER

CD200 Expression Level on Chronic Lymphocytic Leukemia B Cells Correlates With Foxp3+ Regulatory T Cells Frequency in These Patients

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Background: CD200 plays a key role in regulation of the immune system and has been shown to be up-regulated in different tumours including chronic lymphocytic leukemia (CLL). Despite some investigations of the CD200 expression in various tumours, little is known about its correlation with regulatory T cells. In current study, CD200 expression level was investigated in Iranian patients with CLL in comparison to normal B cells and its correlation was studied with foxp3+ regulatory T cells level in these patients.
Material and Methods: CD200 expression level was examined on peripheral blood leukemic B cells obtained from 21 CLL patients and peripheral blood B cells isolated from 8 age matched normal subjects by Flow cytometry. This technique was also used to determine frequency of foxp3+ regulatory T cells in the same CLL patients.
Results: Our results demonstrated significant up-regulation of CD200 in B-CLL in all patients compared to normal B cells ($p = 0.006$). Also CD200