metabolic change after chemotherapy in patients with NK-T cell lymphoma (NK-T).
Purpose: The purpose was to determine the predictive value of FDG-PET after chemo1 in NK-T and compare FDG uptake pattern of NK-T with DLBL.
Method: Five patients (M:F = 5:1, 45+8.7 year) with NK-T and 14 patients (M:F = 11:14, 55.5+14.1) with DLBL were prospectively enrolled in this study from May 2005 to February 2007. The protocol was approved by Institutional Review Board and all patients gave informed written consent. F-18 FDG PET/CT was performed before (baseline) and after chemo1. FDG uptake pattern was evaluated by two aspects: metabolic activity (MA) and metabolic size (MS).
(1) For MA evaluation, we acquired maximum standardized uptake value (maxSUV) of the lesion and calculated the corrected SUV (SUVcor) by subtracting the SUV of surrounding normal tissue from maxSUV of lesion. The decrease rate of SUVcorr after chemo1 [MA(%)] was calculated as $[MA(\%)] = [(SUV1 - SUV2)/SUV1] \times 100$, where SUV1 is baseline SUVcor and SUV2 is SUVcor after chemo1.
(2) Metabolic size was calculated by multiplying the perpendicular diameters of tumor in largest tumor size section. The decrease rate of metabolic extent after chemo1 [ME(%)] was calculated as $[ME(\%)] = [(MS1 - MS2)/MS1] \times 100$, where MS1 is baseline MS (cm^2) and MS2 is MS after chemo1.
Result: A total of 52 regions of interest(ROIs) [23 NK-T(n = 5), 42 DLBL(n = 15)], were evaluated in 19 patients. (1) In 23 NK-T, SUV1 ranged 3.9 to 7.6 (mean 5.7; SD 1.0), SUV2 3.9 to 7.5 (mean 5.6; SD 1.0), MA(%) 0.2 to 2.7 (mean 1.1; SD 0.8). MS1 1.5 to 6.0 (mean 3.5; SD 1.4), MS2 0.4 to 3.3 (mean 1.9; SD 0.1), and ME(%) 16.6 to 75 (mean 45.7; SD 17.2). 2) In 42 DLBL, SUV1 ranged 2.5 to 19.8 (mean 9.7; SD 2.2), SUV2 1.9 to 6.5 (mean 3.9; SD 1.2), MA(%) 1.3 to 72.1 (mean 61.2; SD 11.8). MS1 2.19−10.45 (mean 5.26; SD 2.02)cm2, MS2 0 to 0.78 (mean 0.21, SD 0.23)cm2 and ME(%) 91 to 100 (mean 96, SD 3.06). There were significant difference of the MA(%) and ME(%) between NK-T and DLBL ($p < 0.0001$, non paired student t-test).
Conclusion: This study showed significant different pattern of changes in FDG uptake between the NK-T and DLBL after first cycle chemotherapy. NK-T showed less prominent FDG uptake decrease after 1 cycle of chemotherapy compared to DLBL

6031 POSTER

ULISES: efficacy of epoetin beta in anaemic patients with B-cell lymphoproliferative malignancies

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Objective: To investigate the effect of epoetin beta on hemoglobin (Hb) levels, transfusion need and quality of life (QoL) in anemic patients with B-cell lymphoproliferative malignancies.
Methods: Open-label, multicenter, prospective, non-comparative trial. Overall, 35 evaluable patients from 20 centers in Spain were recruited. Eligible patients were ⩾18 years of age with Hb$^{®}$) 30 000 IU subcutaneously (SC) once weekly for up to 52 weeks. Adverse events and vital signs were monitored throughout. Efficacy endpoints included the proportion of patients responding to epoetin beta (Hb increase ⩾1 g/dL within 8 weeks), time to attain a Hb increase ⩾2 g/dL, transfusion need at 8 weeks and change in health-related QoL score at 8 weeks based on the Functional Assessment of Cancer Therapy-Anaemia (FACT-An) questionnaire (possible values 0–188).
Results: Patients were predominantly male (60.0%), of mean age 64.8 years, mean weight 68.9 kg. The distribution by diagnosis was 17 NHL-DLBL (48.6%), 7 NHL-SLL (20.0%), 6 NHL-FL (17.1%), 4 NHL-MC (11.4%), more than one third of patients (31.4%) had a clinical diagnosis of stage IVB. Mean baseline Hb was 10.0 (±0.7) g/dL. The average duration of epoetin beta treatment was 120.2 days (range 42–347). At weeks 4 and 8, median Hb levels significantly increased with epoetin beta from 10.0 g/dL at baseline to 11.2 (±1.6) g/dL at week 4 and was maintained at 11.2 (±1.7) g/dL at week 8 (both $p < 0.001$). At the final visit, Hb levels increased to 12.3 (±1.6) g/dL. An Hb increase ⩾1 g/dL within 8 weeks was attained by 58.5% of patients; while an Hb increase ⩾2 g/dL was achieved by 64.7% of patients (mean 7.9 weeks). Overall, 29 (83%) and 31 (92%) patients remained transfusion-free at week 4 and week 8, respectively. The FACT-An QoL score improved from 120.6 at baseline to 122.5 at week 8, although this was not significant. Adverse events were generally mild and transient and no unexpected changes in vital signs were reported.
Conclusions: Epoetin beta 30 000 IU SC once weekly is an effective and well tolerated therapy for the treatment of anemia in patients with B-cell lymphoproliferative malignancy. Epoetin beta also provides significant reduction in transfusion need, a key criterion according to current 2006 European Organization for Research and Treatment of Cancer guidelines.

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The immunohistochemical expression of BCL-2 to identify subgroups with different prognoses in diffuse large B-cell lymphoma

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Introdution: Diffuse large B-cell lymphoma (DLBCL) is a heterogeneous disease, clinically and morphologically, reflecting a mixture of underlying biologic or genetic differences. Therefore, it is important to identify at diagnosis biological markers which allowed determination of subgroups with favourable or unfavourable evolution.
Objective: The goal of this study was to evaluate the impact of BCL-2 tumor expression on overall survival (OS) in germinal center B-cell (GCB) and non-GCB, in patients with DLBCL, respectively.
Cases and Methods: Seventy four untreated pts (median age: 59 yrs: 39M/35F) with DLBCL de novo diagnosed in a single institution, treated with CHOP-like regimens. median follow-up time of 16 months and average of 27.5 months, with 63% presenting nodal disease tissue microarrays (TMA) blocks were created from paraffin-embedded, formalin-fixed block and stained with antibodies to CD10 (clone 56C6; Novocastra; NCL-CD10–270), BCL-6 (clone GI 191E/A8; Cell Mark; CMC 798), MUM1 (clone MUM1p; Dako, CA; M7259) and BCL-2(clone 124, Dako, M0887).
Results: Tumor expression of BCL-2 (cutt off 10%), by TMA, was seen in 45% and was associated with a worse OS ($p = 0.03$). Tumor expression of BCL-2 for the group GCB was not associated with a significantly longer OS ($p = 0.58$), whereas tumor expression of BCL-2 for the group non-GCB was associated with a significantly longer OS ($p = 0.02$).
Conclusion: The BCL-2 expression within the NGC presented an unfavorable impact on the outcome, which was not observed in the GC.

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Treatment of non-Hodgkin lymphoma of the Waldeyer's ring

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Background: Non-Hodgkin lymphoma (NHL) can affect any organ. Up to a quarter of NHL have an extra-nodular origin. I was our purpose to evaluate the treatment of Waldeyer's ring NHL (WR-NHL) in a single comprehensive cancer centre and identify potential prognostic factors.
Material and Methods: Retrospective review of patients treated in our institution for WR-NHL between Jan/1996 and Dec/2005. Descriptive statistical analysis of clinical variables was performed as well as survival analysis by Kaplan-Meier methodology. Log rank test was used for the identification of clinical prognostic factors.
Results: Twenty-four patients (pts) were identified, 63% of them were male. The median age at diagnosis was 60 years. B-cell NHL was more commonly identified, with 20 cases of diffuse large cell lymphoma (DLCL) and 1 case of follicular cell lymphoma. Ann Arbor stage I or II was diagnosed in 16 pts (76.2%). Chemotherapy (CT) followed by radiotherapy (RT) was the treatment of choice in 13 pts, CT alone in 7 pts and RT in 1 pts. The CT regimens used were CHOP (13 pts, 1 pts rituximab-CHOP), CNOP (7 pts) and ACOB (1 pts). Complete response (CR) was achieved in 16 pts (76%), partial response in 1 pts (5%) and 4 pts (19%) had disease progression during therapy. Of those that achieved CR, 6 (37.5%) relapsed. With a median follow up of 33 months, 10 pts (47%) are alive and free of lymphoma (AFL) and 11 pts died (8 with lymphoma). The median survival was 60 months. Elevated LDH and advanced stage at diagnosis were associated with a worse prognosis.
T-cell NHL of peripheral subtype with no other specification was identified in 3 pts, all with Ann Arbor stage I disease. Two pts were treated with ACOB followed by RT and 1 pts was treated with CHOP. CR was achieved in all patients. Two relapsed, of which 1 died with lymphoma. Two pts are AFL.
Conclusions: WR-NHL is an uncommon location for primary extra-nodal NHL. In our institution, B-cell DLCL was the most frequently diagnosed subtype. The median survival was 60 months and elevated LDH and advanced stage at presentation were predictive of worse outcome.