an n° cycles/pt: 8 (2-8), and 14 pts. received radiotherapy. Toxicity: 29/298 cycles (9.7%) were delayed, mainly because of infectious complications (17 cycles) or neutropenia (4 cycles); in 14 / 298 cycles (4.7%) the pt. required hospitalization, and all but one of these pts. were over 60 y. Hematologic toxicity: Anemia grade II - III WHO 23.3% and neutropenia grade III - IV WHO 23.3%; 10 pts. received an erithropoietic factor with improvement. Infectious complications grade III - IV WHO appeared in 14 / 298 cycles (4.7%); two pts. died from a bilateral interstitial pneumonitis without severe neutropenia and microbiological identification; none of them had received SMX-TMP prophylaxis. Other two pts. died after 2° cycle of chemotherapy from cardiovascular disease. All toxic deaths were in pts. over 65 y. Relapse: 2/36 pts (5.5%) with a median follow-up of 20 months (3-34). Survival: Seven pts. have died; 4 toxic deaths, another 2 during second-line treatment after a PR and one non-related death. The 2-years overall survival is 80.3% and progression-free surival (PFS) for pts. in CR is 79.7%. *Conclusions.* CHOP-14 associated with rituximab obtains a high rate of CR (83%) that also seems to be long-lasting, with only two relapses in 20 months and a 2-year PFS of 80%. Toxicity appears reasonable and affecting specially older pts.; only 9.7% of cycles has been delayed and, since SMX-TMP prophylaxis was initiated, no other pneumonitis have been recorded.

0699

RITUXIMAB AND ESHAP PLUS G-CSF AS AN EFFECTIVE PERIPHERAL BLOOD PROGENITOR CELL MOBILIZATION REGIMEN IN PRETREATED B-CELL NON-HODGKINS LYMPHOMA: A PRELIMINARY REPORT OF COMPARISON WITH ESHAP PLUS G-CSF

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Background. The ESHAP has been reported as excellent mobilization chemotherapy in patients with relapsed and poor-risk aggressive non-Hodgkin's lymphoma (NHL). Rituximab added to ESHAP (R-ESHAP) has been tried as salvage therapy for relapsed and poor-risk B-cell NHL. Mobilizing stem cells following R-ESHAP should decrease time to autologous stem cell transplantation (ASCT) by making separate mobilizing chemotherapy unnecessary, while controlling a patient's lymphoma. *Aims.* The aim of this study was to prospectively evaluate the efficacy of mobilization by R-ESHAP plus G-CSF regimen in relapsed or poor-risk B-cell NHL. *Methods.* Twenty B-cell NHL patients were enrolled. R-ESHAP plus G-CSF (Neutrogin®, Choongwae Pharma Corp., Seoul, Korea) was used to mobilize peripheral blood progenitor cells. The results were compared with those of 24 patients with NHL whose mobilizing chemotherapy was ESHAP. *Results.* The R-ESHAP and ESHAP groups were well balanced for age, sex distribution, prior chemotherapy cycles, number of chemotherapy regimens, and radiotherapy to the axial skeleton. Total duration of G-CSF administration was not different between the two groups. The median number of total CD34+ cells harvested per patient was 10.59×10^6/kg (range, $4.88\text{-}52.55\times10^6$/kg) in the R-ESHAP group and 15.34×10^6/kg (range, $0.04\text{-}48.0\times10^6$/kg) in the ESHAP group (p=0.42). The median number of $CD34^+$ cells collected per apheresis was 4.30×10^6/kg (range, $0.30\text{-}21.60\times10^6$/kg) in the R-ESHAP group and 4.40×10^6/kg (range, $0.01\text{-}26.50\times10^6$/kg) in the ESHAP group (p=0.71). Adequate collection (total harvested CD34+ cells > 2×10^6/kg) was achieved in all 20 patients from R-ESHAP group and 22 of 24 (92%) patients from ESHAP group (p=0.19). Optimal collection (total harvested $CD34^+$ cells > 5×10^6/kg) was attained in 95% (19/20) of patients in the R-ESHAP group and 92% (22/24) of patients in the ESHAP group (p =0.67). Kaplan-Meier product limit estimate and log-rank test revealed that the apheresis days to adequate and optimal CD34+ cell collection were not statistically different between the two groups. Thirteen patients from R-ESHAP and 19 patients from ESHAP group underwent ASCT and there were no differences in days to neutrophil engraftment and platelet engraftment. *Summary/Conclusions.* These preliminary results indicate that R-ESHAP plus Neutrogin® is an excellent mobilization regimen in patients with relapsed and poor-risk B-cell NHL.

0700

THE OCCURRENCE OF CNS RELAPSES IN HIGH-RISK AGGRESSIVE LYMPHOMA PATIENS TREATED WITH INTENSIFIED INDUCTION AND HIGH-DOSE CONSOLIDATION PROTOCOLS OF THE CZECH LYMPHOMA STUDY GROUP

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Backround. CNS relapse of systemic NHL is usually fatal and identification of risk group and effective prophylaxis are contraversial issues. *Aims.* to analyse our cohort of high risk NHL patients in terms of CNS relapses and identify risk factors for CNS relapse. *Patients and Methods.* We analysed a cohort of 135 patients younger than 65 years with high-risk (age adjusted IPI 2,3) aggressive lymphomas (73% DLBCL, 15% mediastinal DLBCL, 5% peripheral T-cell, 2% mantle cell, 1% anaplastic large cell, 4% others with no burkitt and no lymphoblastic lymphoma). Patients were prospectively treated with intensified induction and high-dose consolidation protocols designed by CLSG in the period 1998 - 2004. Treatment protocols. Protocol 1: induction 3-4 courses of high-dose CHOP (cyclophosphamide 3 g/m^2, doxorubicin 75 mg/m^2, vincristin 2 mg, prednison 300 mg/m^2 + G-CSF every three weeks (21 pts). Protocol 2: 3 courses of standard CHOP-21 followed by 3 courses of ESHAP (26 pts). Protocol 3: 3 courses of high-dose CHOP + 3 courses of ESHAP (29 pts). Protocol 4: same as protocol 3 with addition of rituximab to each cycle of chemo (59 pts). PBPCs were mobilized after 2nd or 3rd high-dose CHOP in protocol 1 and after 1st or 2nd ESHAP in protocols 2,3,4. Patients in complete or partial remission after all types of induction treatment were consolidated with BEAM and ASCT. IF radiotherapy was administered to initial bulk or to residual mass after chemo. CNS involvement at diagnosis was an exclusion criterion. Intrathecal CNS prophylaxis consisted of 15 mg methotrexate +- 40 mg ara-C and it was recommended but not mandatory part of the protocols. Intrathecal prophylaxis received 50% of patients with median number of 3 cycles for patient (range 1-8). *Results.* The median age of the whole cohort was 46 years, male/female ratio 76/59. 58% had IPI 2 and 42% IPI 3. We observed 9 CNS relapses (7%), 7 on therapy, one 1 month after completion of the therapy and one late relapse following 15 month after diagnosis. Original histologies in CNS relapsing patients were DLBCL 6x, 1x mediastinal DLBCL, 1x PTL, 1x FL. 5 of these patients received CNS prophylaxis (all 5 pts received i.t. MTX 15 mg+ara-C 40 mg, median 5 cycles). Median time from study entry to CNS recurrence was 5 month (range 2-15). Median survival after diagnosis of CNS relapse was only 1 month (0,1 -16). No patient after CNS relapse is alive, 8 died due to progression, one after 16 month in next CR due to pneumonia. Evaluated risk factors for CNS progression were IPI, clinical stage, B symptoms, performace status, LDH level, intrathecal prophylaxis and type of treatment protocol. None of these risk factors were significantly predictive for CNS relapse. *Summary/Conclusions.* Incidence of CNS poression/relapse in this cohort of high risk lymphoma patients is relatively low, but outcome of all patiens is fatal. Our patients did not benefit from intrathecal prophylaxis. More precise detection of patient at risk for CNS involvement and detection of occult disease at diagnosis are needed to differentiate the treatment protocols with appropriate CNS prophylaxis for these patiens.

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0701

BURKITT AND NON-BURKITT TYPES OF CHIDHOOD B-CELL LYMPHOMAS (B- NHL) - COMPARISON OF TREATMENT *RESULTS*. A REPORT OF POLISH PAEDIATRIC LEUKEMIA/LYMPHOMA STUDY GROUP (PPLLSG)

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