induces cytotoxicity via antibody-dependent cell-mediated and complement-dependent mechanisms, as well as via direct apoptotic signaling. Combination of rituximab with chemotherapy has an additive or synergistic effect and has been reported to increase response rates and prolong remission and survival in patients with diffuse large B-cell lymphoma (DLBCL). *Aim*. To evaluate and compare retrospectively the response rates and outcome of a large number of patients with DLBCL according to the kind of treatment administered, CHOP alone or rituximab-CHOP. *Methods.* Between 1997 and 2004, 204 consecutive patients were diagnosed with DLBCL in our department. Patients were divided in two groups according to the kind of treatment administered. Group A comprised 113 (55.4%) patients, that received CHOP and CHOP-like regimens every 3 weeks and group B consisted of 91 (44.6%) patients, that additionally received rituximab 375 mg/m^2 IV on day 1 of each chemotherapy cycle. Patients in both groups underwent a median number of 6 (1-8) cycles. Radiotherapy was additionally administered in 24 (21.2%) patients of group A and in 28 (30.8%) patients of group B ($p > 0.05$). Patients' characteristics (gender, age, nodal or extranodal primary site of origin, stage, IPI, presence of B symptoms, extranodal involvement other than primary, bulky disease and bone marrow infiltration), as well as response rates, were compared between the two groups using χ^2 tests. Disease-free survival (DFS), overall survival (OS) and failure-free survival (FFS) were estimated according to the Kaplan-Meier method. Differences in survival rates were assessed using the log-rank test. *Results.* Patients were well-balanced regarding their characteristics ($p>0.05$). Median follow-up time for groups A and B was 62 (1-99) and 29 (1-62) months respectively ($p<0.001$). On an intention- to-treat basis, complete response rates were similar between groups A and B (88.5% vs. 89% respectively, $p>0.05$). Actuarial 3-year DFS rate was significantly higher in group B compared to group A (89.4% vs. 72.6% respectively, $p=0.046$). Actuarial 3-year OS and FFS rates were not significantly different between groups A and B (77.7% vs. 70% and 62.5% vs. 69.7% respectively, $p>0.05$). *Conclusion*. According to our results, the addition of rituximab to chemotherapy yields a higher DFS rate than chemotherapy alone, in patients with DLBCL. Nevertheless, our study failed to confirm the superiority of the rituximab-chemotherapy combination in terms of OS and FFS rates, probably due to the significantly shorter follow-up of this group of patients.

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MYELOABLATIVE CHEMOTHERAPY AND AUTOLOGOUS STEM CELL TRANSPLANTATION IN POOR PROGNOSIS PATIENTS WITH ADVANCED DIFFUSE LARGE B-CELL AND FOLLICULAR LYMPHOMA EFFECTIVE THERAPY IN FIRST REMISSION

T. Papajik,[1] L. Raida,[1] E. Faber,[1] V. Prochazka,[1] J. Vondrakova[1], S. Rozmanova,[1] Z. Kubova,[1] M. Jarosov,[1] L. Kucerova,[1] J. Jarkovsky,[2] L. Dusek,[2] K. Indrak[1]

[1]*University Hospital Olomouc, OLOMOUC, Czech Republic;* [2]*Masaryk University, BRNO, Czech Republic*

Backgrounds. Conventional chemotherapy in advanced, poor-prognosis diffuse large B-cell (DLBCL) and follicular lymphoma (FL) is still unsatisfactory, and significant number of patients ultimately dies from their disease. The addition of rituximab to initial combination chemotherapy (e.g. R-CHOP and R-CVP) increases the number of complete remissions (CR), prolongs duration of response and survival, but the overall results in high-risk prognostic groups are suboptimal. *Aims.* Number of studies confirm that high-dose chemotherapy and autologous stem cell transplantation (AT) in younger pts. with accumulation of several adverse prognostic factors improves their outcome and prolong survival, and latterly that the treatment with rituximab may be safely included in a chemotherapy regimen preceding stem cell harvest, high-dose chemotherapy and AT. *Methods.* Between 1997 and 2005, a total of 75 newly diagnosed pts. (44 women, 31 men) with poor-prognosis FL and DLBCL were intensively treated (anthracycline-based therapy) at our department. Chemotherapy with addition of rituximab was administrated in 33 of them (44%). 24 pts. achieved complete remission (CR) and 51 pts. partial remission (PR), mostly with a tumor reduction greater than 75%. After BEAM conditioning therapy, median of $7{,}2\times10^6$kg (range, 2,1 - $37{,}3\times10^6$/kg) CD34$^+$ peripheral blood stem cells were reinfused. *Results.* At 100 days following AT, 49 pts. were in CR, 14 pts. in CRu, 7 pts. in PR and 1 pt. relapsed. 4 pts. were shortly after AT and could not be assessed. 15 pts. (20%, 5 with FL, 10 with DLBCL) relapsed/progressed after a median time of 25 months from AT and 8 pts. died from recurrent lymphoma. Only one of the relapsed pts. was treated with rituximab initially (1/33 = 3%), other 14 relapsed pts. were treated with chemotherapy (14/42 = 33%). 60 pts. are still alive in a remission with median follow-up of 34 months (range, 9-117 months) from diagnosis. Estimated 2 years overall survival and event free survival rates are 94% and 87%, respectively, and there were revealed no statistical differences between DLBCL and FL pts. *Conclusions.* Myeloablative chemotherapy and autologous stem cell transplantation in poor prognosis pts. with advanced DLBCL and FL can lead to long-lasting CR. The standard administration of a front-line immunochemotherapy with rituximab can further improve the quality of remission and prolong event-free and overall survival.

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CNS LYMPHOMA AND THE USE OF INTRATHECAL RITUXIMAB- REPORT OF THREE CASES

I. Savic,[1] I. Urosevic,[1] V. Uzurov,[1] S. Popovic,[1] M. Zikic,[2] V. Cemerikic-Martinovic[3]

[1]*Institute for Internal Disease, NOVI SAD, Yugoslavia;* [2]*Clinic of Neurology, NOVI SAD, Yugoslavia;* [3]*Histolab Laboratory, BELGRADE, Yugoslavia*

Backgrounds. Central nervous system(CNS) involvment is an adverse prognostic factor for patients with non-Hodgkin's lymphoma(NHL). Because of the limited passage of rituximab through the blood-brain barrier, intrathecal administration of rituximab has been considered as a possible treatment for CNS lymphoma. Methods. 3 patients with recurrent or persistant CD20+ primary parenchymal CNS NHL were treated at Clinic of Hematology Novi Sad.Nine planned intrathecal injections of rituximab at 20 mg dose were given over a 5-week period.One injection was given in the first, then twice weekly for 4 weeks.Injections were administered in 2 mL of 0,9% saline during 2 minutes.Safetly and tolerability were evaluated by clinical evaluation, including neurologic examination, laboratory blod and cerebro-spinal fluid (CSF) tests and adverse-event reporting.Toxicity was graded according to version 2. of the common toxicity criteria(CTC) of the cancer therapy evaluation programm.Tumor response was assessed by weekly CSF cytology, neurologic examination twice weekly,magnetic resonance image(MRI) scanning and immunohistochemical analyses of CSF(at 5 weeks compared with baseline). MRI and physical and neurologic examinations were repated at 6 weeks(4 week after final injection). *Results.* Our preliminary results suggest that intrathecal administration of rituximab was well tolerated (longest interval follow-up is 4 months).Toxicities observed include mild parasthesias occuring in 1 patient.All patients exhibited cytological and biochemical response, without CD20$^+$ lymphoma cells detectable in CSF with clinical remission and no MRI evidence of brain parenchiaml disease. *Conclusions.* Intrathecal rituximab administration represents a novel means of tretment of CNS involment of NHL.Efficasy and safety data are promising, but future trials and follow-up are required to evaluate this route of administration.

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GOOD RESPONSES OF PRIMARY MEDIASTINAL B CELL LYMPHOMA (PMBCL) AFTER CHEMOIMMUNOTHERAPY (CHOP-14-RITUXIMAB) CONSOLIDATED BY BEAM AUTO SCT AND IFRT

W. Jurczak, B. Piatkowska-Jakubas, A. Giza, D. Krochmalczyk, J. Wegrzyn, P. Mensah, D. Hawrylecka, A.B. Skotnicki

Department of Haematology, CRACOW, Poland

PMBL is a distinct entity in WHO classification prior described as DLBCL variant. It presents as mediastinal bulky tumor, locally invasive to adjacent mediastinal structures. The bone marrow is involved only in 2% of cases. Relapses tend to be extranodal, including central nervous system, liver, kidneys. Prognosis in PMBL treated by CHOP regimen is poor in most cases resistance of lymphoma cells occurs already during the first line chemotherapy and 5 year overall survival is about 20%. Patients characteristics. In 2003-2005 12 PMBCL patients were treated at Hematology Department in Krakow. The medium age patient group was 37,2. In 9 cases the disease was limited to mediastinum (stage II according Ann Arbor), and subsequent 3 patients had more advanced disease with a spread to vertebral column, lungs or adjacent muscles. B symptoms were present in all cases. None of the patient had bone marrow involvement. The majority of patients had elevated LDH (medium 901/uL) and bulky disease at diagnosis (mediastinal mass (>20cm) was present in 7 patients, more than 30 cm in 3 patients). IPI was a poor outcome predictor, as it was low (0-1) in 10 cases and intermediate (2-3) in 2 cases. *Treatment schedule and results*. Patients with PMBL were treated either with intensive chemoimmunotherapy CHOP-14-Rituximab according GLSG (10 patients) or ACVBP chemotherapy according GELA (2 patients). In 8 patients - a good partial response to first line chemotherapy was consolidated by BEAM conditioned by auto SCT. All patients