graft-versus-host disease (GVHD) prophylaxis in 8 patients and Tacrolimus in the other 2. All patients had acute GVHD and 6 of them also developed chronic GVHD. Infection with cytomegalovirus was documented in 4 cases. The time of TMA onset after HSCT was 131 days (34-651). All patients had microangiopathic hemolytic anemia with 74 g/L (65-91) of hemoglobin, 4 schistocytes per field (2-10), a platelet count of 28×10^9/L (11-127), a reticulocyte percentage of 4.58 (0.18-6.55), lactate dehydrogenase (LDH) of 787.5 U/L (574-5174) and unconjugated bilirrubin of 40 µmol/L (7.7-165). These patients also presented: renal insufficiency (n=7), neurologic abnormalities (n=6), coagulation abnormalities (n=6) and fever (n=2). When TMA was diagnosed, CSA was discontinued in all patients. Plasma infusion was assigned to 1 patient, TPE to 5 and 4 began the first regime changing to TPE after 7 sessions (2-11). A total of 72 TPE, with a median of 8 (2-17) per patient, were carried out using the Cobe Spectra cell separator. Those patients received an average of 2.5 L (1.4-3.9) of FFP with a fluids change of 100% remainig isovolemics. The procedures were well tolerated although the clinical improvement was poor. After TPE, renal insufficiency was still present in the 7 patients but headache had disappeared in all of them and LDH decreased to 518 U/L (277-6268). Since the diagnosis, the overall mortality was 90% after 32 days (4-203). The causes of death were multisystem organ failure syndrome (n=7), infection (n=1) and progressive GVHD (n=1). In summary TPE has shown inconsistent results. Even the patients who responded to TPE did not have prolonged survival. However, early detection of TMA may allow advanced evaluation of the patient and change the disease prognosis.

1290

GLOBAL QUALITY OF LIFE OF PATIENTS WITH MULTIPLE MYELOMA AND MALIGNANT LYMPHOMA AFTER THE HSCT: A CROSS-SECTIONAL AND RETROSPECTIVE STUDY

L. Slovacek,[1] B. Slovackova,[2] M. Blazek,[3] L. Jebavy,[1] J. Horacek[1]

[1]*University of Defence, HRADEC KRALOVE, Czech Republic;* [2]*Psychiatric Clinic, HRADEC KRALOVE, Czech Republic;* [3]*Department of Hematology, HRADEC KRALOVE, Czech Republic*

Backgrounds. The cross-sectional and retrospective study analyses the selected factors which influence global quality of life (QoL) of patients with multiple myeloma and malignant lymphoma after the hematopoietic stem cell transplantation (HSCT). *Aims.* 1. to verify the applicability of the Czech version of an international generic European Quality of Life Questionnaire - Version EQ-5D for the evaluation of global QoL of patients after the HSCT at the Department of Clinical Hematology of the 2nd Internal Clinic in the University Hospital and Medical Faculty of Charles University in Hradec Kralove, Czech Republic, 2. to evaluate the global QoL of patients with multiple myeloma and malignant lymphoma after the HSCT at the Department of Clinical Hematology of the 2nd Internal Clinic in the University Hospital and Medical Faculty of Charles University in Hradec Kralove, Czech Republic, 3. to analyse factors which influence global QoL of patients with multiple myeloma and malignant lymphoma after the HSCT at the Department of Clinical Hematology of the 2nd Internal Clinic in the University Hospital and Medical Faculty of Charles University in Hradec Kralove, Czech Republic. Patients and Methods. The total number of respondents after the transplantation from 2001 to 2003 was 80 and the return rate of questionnaires was 70% (56 respondents: 32 respondents (18 men, 14 women) with multiple myeloma and 24 respondents (11 men, 13 women) with malignant lymphoma). All respondents with multiple myeloma were after the autologous HSCT. 22 respondents with malignant lymphoma were after the autologous HSCT and 2 respondents with malignant lymphoma were after allogenous HSCT. The average age of patients with multiple myeloma was 60 years and the average age of patients with malignant lymphoma was 44,5 years. The Czech version of an international generic EuroQol Questionnaire - Version EQ-5D was used. The influence of monitored factors (age, sex, education, merital status, polymorbidity, nicotinism, religion, type of disease and the time lapse from the HSCT) on global QoL of patients was determined by means of dispersion analysis. Results. The above-mentioned factors proved statistically significant dependence of EQ-5D score and EQ-5D VAS on age (in both cases $p<0,01$), nicotinism in patients with multiple myeloma (in both cases $p<0,05$) and on type of disease (in both cases $p<0,01$). *Conclusion*. EQ-5D score and EQ-5D VAS significantly decrease with increasing age in both groups patients and with nicotinism in patients with multiple myeloma, and are significantly higher in patients with malignant lymphoma. The influence of other factors on EQ-5D score and EQ-5D VAS was not proven as statistically ignificant. The global QoL of patients with multiple myeloma after HSCT is lower (mean EQ-5D score was 68,9%, mean EQ-5D VAS was 66,6%) than in patients with malignant lymphoma after the HSCT (mean EQ-5D score was 82,7%, mean EQ-5D VAS was 76,7%).

1291

PAIN COPING MEASURING IN HEMOPHILIA- INDIVIDUAL VERSUS COMPOSITE SCORES

M. Sretenovic,[1] P. Kovacevic,[2] I. Elezovic,[3] D. Boskovic[3]

[1]*Clinical Center of Serbia, BEOGRAD, Serbia and Montenegro;* [2]*Faculty of Phylosophy, BEOGRAD, Serbia and Montenegro;* [3]*Institute of Hematology, BEOGRAD, Serbia and Montenegro*

Backgrounds. Coping with pain had been the object of studies for long time before the instruments for assessment in specific illnesses, like haemophilia, were constructed. Some research has already indicated that individual sub-scales in Cope Strategies Questionnaires (CSQ) are more meaningful than composites (*Jensen MP et al., 1992*). *Aims.* The aim of this study is to describe pain coping strategies among patients with haemophilia and find out if the results are related to the severity of disease. *Methods.* A group of 24 adult patients with moderate and severe haemophilia is presented. The patients' coping with pain is assessed using the Pain CSQ Adapted for Haemophilia (*PCSQ, Barry and Elander, 2002*). This questionnaire was translated into Serbian, according to the recquired guidelines. Clinical severity of disease is measured using the frequency of bleeding episodes in the previous year (Solovieva S, 2001). Physical activity level is measured on a two- point scale. Statistical analysis, firstly performed, was based on the three originally defined factors in the PCSQ: negative thoughts about pain, coping attempts and passive adherence. Afterwords, it was based on 14 subscales, each one grounded on of 3 to 6 items. *Results.* In the factor analysis, no differences are found in coping with pain between the groups with clinically severe and moderate disease ($p>0,05$), between patients with biologically severe and moderate haemophilia ($p>0,05$) and between those with difficulties in hard (moderate) physical activity and those with difficulties in any (no) acitivity ($p>0,05$). When using sub-scale scores, differencies in pain coping strategies were found between the groups. Patients with difficulties in hard or moderate physical activities ignored pain sensations and increased behavioural activities, using them like preferred strategies more than people with difficulties in any or no activity ($p<0,05$). On the other hand, patients with difficulties in any activity used clotting factor and ice more often to cope with pain ($p<0,05$). Patients with clinically moderate disease also ignored pain sensations more willingly than those with severe haemophilia ($p=0,026$), who relied on praying and hoping ($p=0,01$) and used anger self- statements more when in pain ($p=0,054$). Patients with biologically moderate disease used ice more than those with severe disease ($p=0,059$). *Summary*. The results based on factor analysis suggest that the severity of hemophilia may not be the factor detemining the type of patient's pain coping strategy. The results based on sub-scales analysis suggest that possibly it would be better to analyze scores from the questionnaire in this way, rather than putting sub-scales together into three factors.

1292

FATIGUE IN NEW NON-HODGKINS LYMPHOMA PATIENTS, STRATIFIED ACCORDING TO THE INTERNATINAL PROGNOSTIC INDEX

A. Novik,[1] S. Kalyadina,[2] T. Ionova,[2] A. Kishtovich,[2] D. Fedorenko,[1] T. Chagorova,[3] M. Kopp,[3] J. Lebedeva,[3] A. Myasnikov,[3] N. Malakchova,[3] N. Osipova,[2] A. Pankova,[3] G. Gorodokin[4]

[1]*National Pirogov Medical Surgical Center, MOSCOW, Russian Federation;* [2]*National Cancer Center, ST. PETERSBURG, Russian Federation;* [3]*Russian Lymphoma Study Group, MOSCOW, Russian Federation;* [4]*NJ Cent. for QoL and Health Outcome Res., NEW JERSEY, USA*

Background. Fatigue is the most distressing symptom associated with cancer. Fatigue prevalence and severity observed during prior specific treatment may help to better understand the potential underlying mechanisms and to provide patient-centered treatment. At this time, the data on fatigue severity and its prevalence in new non-Hodgkin's lymphoma (NHL) patients are lacking. The aim of this study was to describe fatigue prevalence and severity in new NHL patients, stratified according to the International Prognostic Index (IPI). *Patients and Methods*. 138 patients with newly diagnosed NHL - 76 aggressive (stage I-IV, mean age 60.0 SD=17.2, males/females 40/36) and 62 indolent (stage I-IV, mean age 59.8 SD=16.0, males/females 35/27) were included in this study. Each patient completed the Brief Fatigue Inventory (BFI) before treatment. To find out the relationship between fatigue and International Prognos-