CSF reduces the hematological toxicity and supportive care requirements in recipients of autologous and allogeneic transplants. In our study we combined G-CSF and GM-CSF to mobilize PBPC for transplantation. **Method:** A total of 21 subjects participated in the study. Seven patients had neuroblastoma stage IV; 6 had stage IV Hodgkins lymphoma; 2 had second remission acute mycloid leukemia; 2 had third remission acute lymphoblastic leukemia; 1 had second relapsed rhabdomyosarcoma, and 1 with myelodisplastic syndrome. There were 2 normal donor children. All were under 18 years old. All the patients were mobilized with G-CSF & GM-CSF, 10ug/kg/d x 5 days each, followed by PBPC harvesting until a threshold of $2.0x10^6$/Kg CD34+ cells was obtained. A total of 11 autologous and 2 allogeneic PBPC transplants were performed. **Results:** Data on PBPC 24, 48, 72, and 96hrs after the fifth dose of cytokines are shown in the below table: Six patients required 2 apheresis, 7 required 3, and 7 required 4 apheresis to achieve our goal. For the 11 PBPC autologous transplant patients, the median days to get an ANC>500/mm^3 was 9.8 days; 9.5 days for the allogeneic. Median days to platelets engraftment was 11.5 days for the autologous PBPC; 12.5 for the allogeneic. None of the subjects experience bone pain, headache, flu like side effects or a documented o proven infection. **Conclusions:** The combination of G-CSF & GM-CSF (10ug/kg/day x 5 days) is well tolerated. It contrived a clinical reduction in the degree and duration of severe neutropenia and thrombocytopenia in both allogeneic/autologous transplants. It seems to be cost effective and adequate to mobilize more than an average numbers of PBPC(2-3 apheresis) to perform allogeneic/autologous hematopoietic transplant in pediatric population.

Parameter	24 hrs	48 hrs	72 hrs	96 hrs	Total
Mean #CD34+x10exp6/kg	4.47	3.87	2.12	1.20	11.65

LATE EFFECTS/QUALITY OF LIFE

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CLINICAL AND QUALITY OF LIFE MONITORING IN MULTIPLE SCLEROSIS PATIENTS UNDERGOING HIGH DOSE CHEMOTHERAPY AND AUTOLOGOUS STEM CELL TRANSPLANTATION

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High dose chemotherapy (HDCT) with autologous stem cell transplantation (ASCT) is a new treatment strategy for patients with multiple sclerosis (MS). Quality of life (QoL) is increasingly used as a treatment outcome along with traditional clinical outcomes. Monitoring of clinical and QoL outcomes of HDCT and ASCT in MS patients is worthwhile. The aim was to provide monitoring of clinical outcomes and QoL parameters in MS patients before and at different time-points after ASCT. Seven patients with MS, who underwent HDCT and ASCT within Russian Cooperative Group of High Dose Chemotherapy in Autoimmune Diseases, were enrolled in the study. All the patients previously underwent conventional treatment. The transplantations were performed in accordance with EBMT protocols. MRI was carried out before APSCT and repeated every 6 months. QoL was assessed by Russian versions of QoL questionnaires: FACT-BMT - specific for patients with BMT, FAMS - specific for MS patients. QoL and EDSS evaluation were provided at baseline, at discharge, and at 3, 6, 8, 12 months and every 6 months following ASCT. Follow-up period varied from 6 to 36 months (one patient - 6 months, three patients -18 months, two patients - 24 months, one patient -36 months). Stabilization of the disease was achieved in six cases: in four patients no new lesions on MRI were observed, in two patients a decrease in the number of lesions took place. In one patient one new lesion appeared 1.5 years after APSCT. Comparison of EDSS before ASCT and at follow-up revealed its decrease in 6 patients; in one patient it remained the same and in the patient with disease progression EDSS increased (from 6.5 to 7.0). Distinct QoL improvement was observed in all the patients with disease stabilization at the end of follow-up. QoL improvement on the majority of scales was achieved within 3 months after ASCT as compared to baseline with a tendency to further improvement at late follow-up. Definite QoL improvement was documented at one year after ASCT and remained stable throughout the later follow-up in the patients with long-term follow-up. HDCT and ASCT in patients with MS resulted in disease stabilization in six out of seven patients under observation. Along with clinical improvement distinct increase of QoL parameters in MS patients took place.

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QUALITY OF LIFE IN PATIENTS WITH CHRONIC GRAFT VS HOST DISEASE: A QUALITY PROCESS IMPROVEMENT IN BLOOD AND MARROW TRANSPLANTATION

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Chronic Graft vs. Host Disease (cGVHD) occurs in approximately 50% of post allogeneic blood and marrow transplantation (BMT) patients. The effects can be devastating to patients, who have survived this aggressive treatment regimen to cure or control their malignancies. At our comprehensive cancer center, the GVHD clinic MD, APN and/or PA evaluate patients with cGVHD referred by other BMT or community physicians. The clinic uses a multidisciplinary approach to provide patients comprehensive assessment and treatment for the physical and psychosocial issues. During the initial assessment the patients complete the FACT-BMT (Functional Assessment of Cancer Therapy) and the MDASI (MD Anderson Symptom Inventory) to help identify quality of life (QOL) issues. The FACT-BMT is a 50-item (0-4 scale) instrument measuring QOL with subscales including physical, social/family, emotional and functional well being as well as items, addressing BMT related issues (infertility, eyesight, memory, regret about BMT, cost, family hardship). Higher scores indicate improved the QOL. The tool developed by Cella has demonstrated reliability and validity. The MDASI is a 13-item (0-10 scale) tool that measures symptoms experienced. The outcomes data on 36 cGVHD patients who were 6 months to 12 years post BMT indicated the following results: patients experienced the greatest alterations in the functional, physical, and emotional domains. The majority (97%) experienced problems with skin, blurred vision (73%), hardship on family (71%), memory (69%) and financial burden (67%). The data from the MDASI indicated the 5 most frequently reported symptoms to be: fatigue (73%), sleep disturbance (70%), sadness (70%), drowsiness (67%), and dry mouth (64%). With information from the QOL tools and comprehensive physical examination, patient referrals were expedited. Improvement in patients QOL with sequential administration of the tools demonstrates the importance of this GVHD multidisciplinary clinic approach.

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PERFORMANCE OF YOUNG LONG TERM SURVIVORS AFTER ALLOGENEIC STEM CELL TRANSPLANTATION (SCT)

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Purpose: To examine overall performance of adolescents and young adults who have survived long term after allo-SCT. Performance was estimated by means of Lansky and Karnofsky scores. Patients & methods: Patients were all transplanted at the same BMT unit between1987 and 1997. Age at transplant was 10 to 30