

TREATMENT OUTCOMES IN MULTIPLE SCLEROSIS (MS) PATIENTS AFTER HIGH DOSE CHEMOTHERAPY (HDCT)+AUTOLOGOUS STEM CELL TRANS- PLANTATION (ASCT): FOLLOW-UP RESULTS OF A PROSPECTIVE MULTICENTER STUDY

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Recently, HDCT+ASCT was proposed as a new and promising therapy for patients with MS. We aimed to study the clinical and patient-reported outcomes in MS patients after HDCT+ASCT. Fifty patients with MS (secondary progressive – 25 patients, primary progressive – 10, progressive-relapsing – 1, relapsing-remitting – 14) from 6 medical centers were included in this study (mean age - 32.0, range: 17-51; male/female – 21/29). The median follow-up duration was 18 months (range 6–84 months). All of the patients had previously undergone conventional treatment. Neurological and quality of life (QoL) evaluation was provided at baseline, at discharge, at 3, 6, 9, 12 months, and every 6 months thereafter. MRI examinations were conducted at baseline, at 6, 12 months, and at the end of follow-up. No transplant-related deaths or unpredictable severe adverse events were observed. All of 41 patients included in the efficacy analysis experienced a clinical stabilization (n=15) or improvement (n=26). Two patients deteriorated to a worse score after 18 months of stabilization; 2 others progressed after 12 and 30 months of improvement, respectively. All patients with clinical stabilization and improvement had negative MRI scans. All patients who did not have disease progression were off therapy throughout the post-transplant period. The progression-free survival at 6 years after HDCT+ASCT was 72%. Out of 23 patients included in QoL analysis 21 exhibited improved QoL. In conclusion, the results demonstrate high efficacy of HDCT+ASCT in MS: Further studies should be done to investigate clinical and QoL response in MS patients receiving HDCT+ASCT to better define treatment success.