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## COMPARISON OF ERGOTHERAPY ON COGNITIVE FUNCTIONS WITHIN DIFFERENT TYPES OF MULTIPLE SCLEROSIS DISEASE

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**Introduction:** Cognitive disorders occur in 30-70% of the cases in MS patients. Ergotherapy is an important part of the treatment of MS patients, its effectiveness is different for different MS types.

**Objectives:** To search and compare effect of ergotherapy, applied on different types of MS, on cognitive functions.

**Methods:** 56 MS patients, of which 15 were Benign (BMS), 18 were Relapsing Remitting (RRMS), 23 were Progressive Type (PMS), were taken. Orientation, Visual perception, Spatial perception, Motor praxis, Visual Motor Organization, Thinking Capacity, Concentration were evaluated within Loewenstein Occupational Therapy Cognitive Assessment. After the first evaluation, the cases were comprised in ergotherapy programme, focusing on personal needs of patients, for a period of 12 weeks, on the first 2 days of the week, 1 hour. Subsequent to the applied ergotherapy programme, comparisons were made for different MS types, and effect of the treatment on cognitive functions were evaluated.

**Results:** Total LOTCA results increased significantly in 3 groups after the treatment. While change in visual perception, visual motor organization, and thinking capability in BMS group was significant change in orientation, spatial perception, motor praxis, concentration was not significant.

While change in visual perception, motor praxis, visual motor organization, and thinking capacity in RRMS group was significant; change in orientation, spatial perception, concentration was not found significant. In PMS group, in the fields of Orientation, Visual Perception, Spatial Perception, Motor praxis, Visual Motor Organization, Thinking Capacity, Concentration, there were significant increases.

**Conclusion:** Ergotherapy has a crucial place in rehabilitation programme. It gives rise to significant changes for 3 types of MS in terms of some cognitive capacities, and there were no differences in terms of ergotherapy effectiveness. In 3 groups, the maximum difference after the treatment was detected in visual motor organization field. We are of the opinion that integrated approaches, bearing the objective of development of both cognitive and motor capacities in ergotherapy programmes were the relevant factor in this respect.

The increase in most of the cognitive fields in PMS group indicated that even in progressive type of MS, negative effects of the disease were reduced through ergotherapy.