Oral Communication

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Repetitive Peripheral Magnetic Stimulation (rPMS) to Recover Balance Function In Hemiparetic Patients

Topic: Neurostimulation (rTMS, tDCS, etc.)

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BACKGROUND

Balance impairment in patients with hemiparesis due to stroke requires multimodal correction. Targeted stimulation of the core muscles can increase the effectiveness of balance recovery and improve the mobility and quality of life of post-stroke patients.

Development of a diagnostic and therapeutic approach to comprehensive restoration of balance function using Repetitive Peripheral Magnetic Stimulation (rPMS) of the core muscles in patients with hemiparesis due to stroke.

METHODS

The results of our own prospective randomized clinical study of 90 patients in the recovery period of stroke will be presented. The results of the X-ray examination of the spine, pelvis, ultrasound examination of the abdominal and lumbar muscles, stabilometry, gait video analysis, basic rehabilitation assessment conducted. Repetitive Peripheral Magnetic Stimulation was used to stimulate the core muscles on the hemiparetic side and peripheral nerves in lumbar area.

RESULTS

As a result of the treatment, reliable signs of improvement in all the main indicators of balance and gait were obtained. The results of the main group showed an 25% higher efficiency than the control group. Factors influencing balance disfunction and factors complicating the restoration of balance and gait in this category of patients were identified.

CONCLUSION

The efficiency of post-stroke balance recovery may increase due to introduction of the rPMS of peripheral nerves in the lumbar region and core muscles into the rehabilitation program.

Statement of Disclosures

None

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