

KINESYTHERAPY IN PATIENTS WITH PARKINSON'S DISEASE

E. Efremova¹, D. Vasileva¹, PhD, E.Lichkova²

¹ Faculty of Medical Sciences, Goce Delcev University, Stip, North Macedonia, ²Department of Neurology, Clinical Hospital – Shtip, North Macedonia

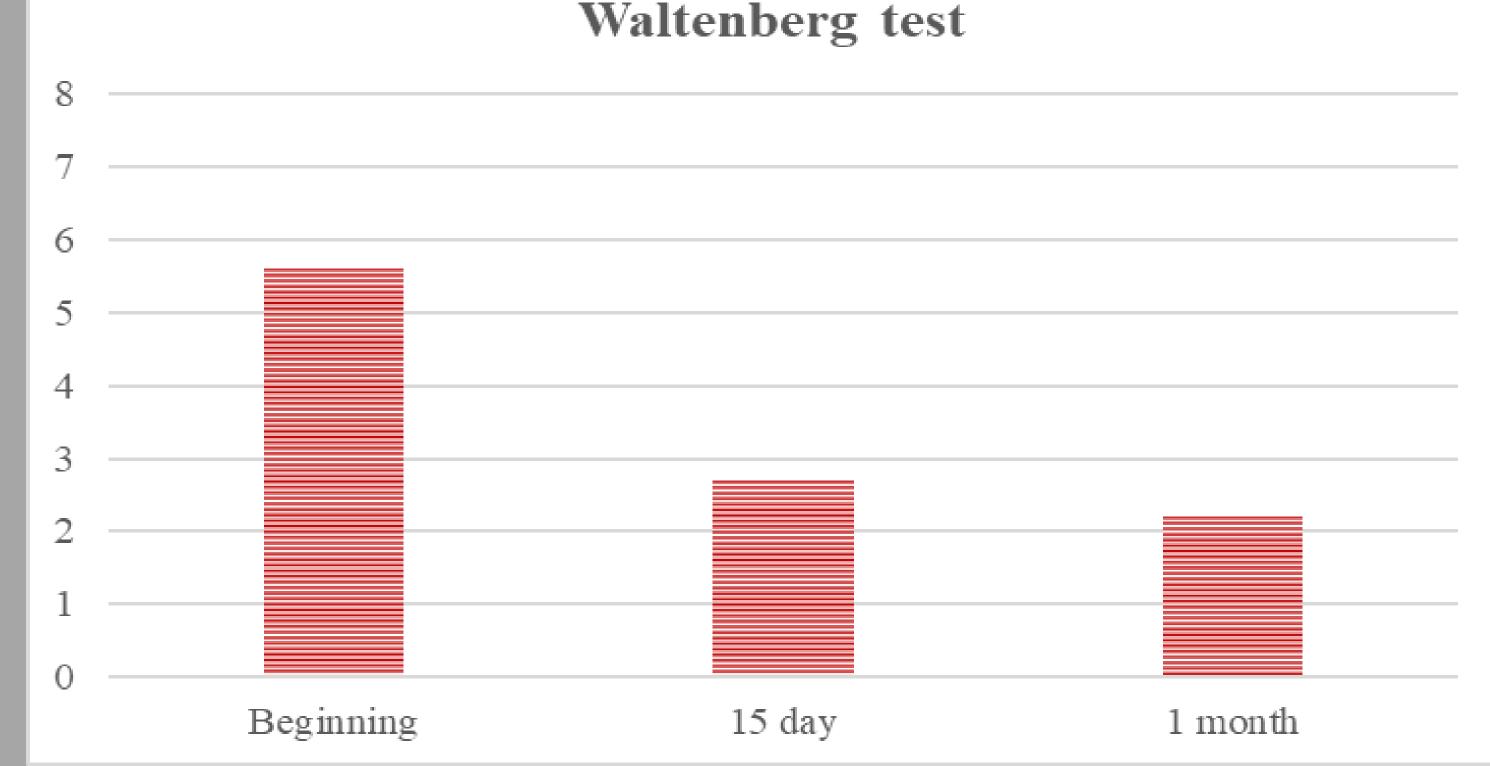


PURPOSE

To monitor the influence of kinesitherapeutic agents on motor abilities in patients with Parkinson's disease.

CONTINGENT AND METHODS

The study included 12 patients with Parkinson's disease (7 men and 5 women, mean age 64.2+3.7), II-III according to Hoehn



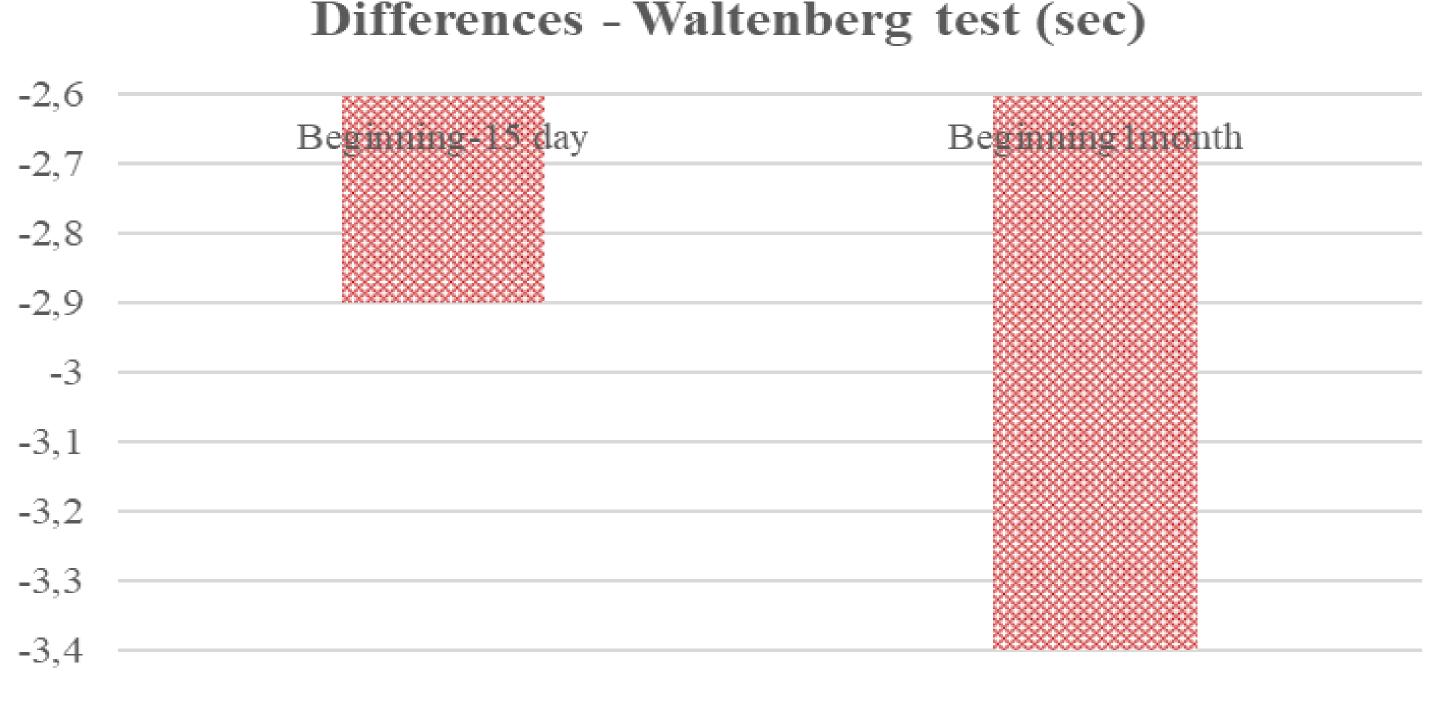
and Yahr during a period of 1 month.

15 individual one-hour kinesitherapeutic procedures were carried out, including spinal flexibility exercises from a relaxed initial position, dynamic exercises, games and sports elements. In the preparatory part, breathing exercises with prolonged exhalation, segmental massage, relaxing procedures, manual stretching with swaying are used. The main part of the procedure aims to reduce bradykinesia by mobilizing the spine and increasing the range of motion in the joints, improving balance and gait stability through cyclical exercises. The effect of the application of kinesitherapeutic agents on movement disorders is evaluated - subjective assessment of body posture, Waltenberg test, modified brain test.

RESULTS

The study shows that applied kinesitherapy during 1 month (15 individual procedures) has a positive effect (p<0.001), reduces the rigidity of cervical muscles, improves posture and coordination of patients with Parkinson's disease.

Fig.3 Graphical representation in changes incervical muscle stiffness, evaluated with the Waltenberg test (sec)



CONCULSION

The implementation of kinesitherapeutic agents for a long time shows a positive effect in patients with Parkinson's disease, which leads to an impact on their motor abilities.

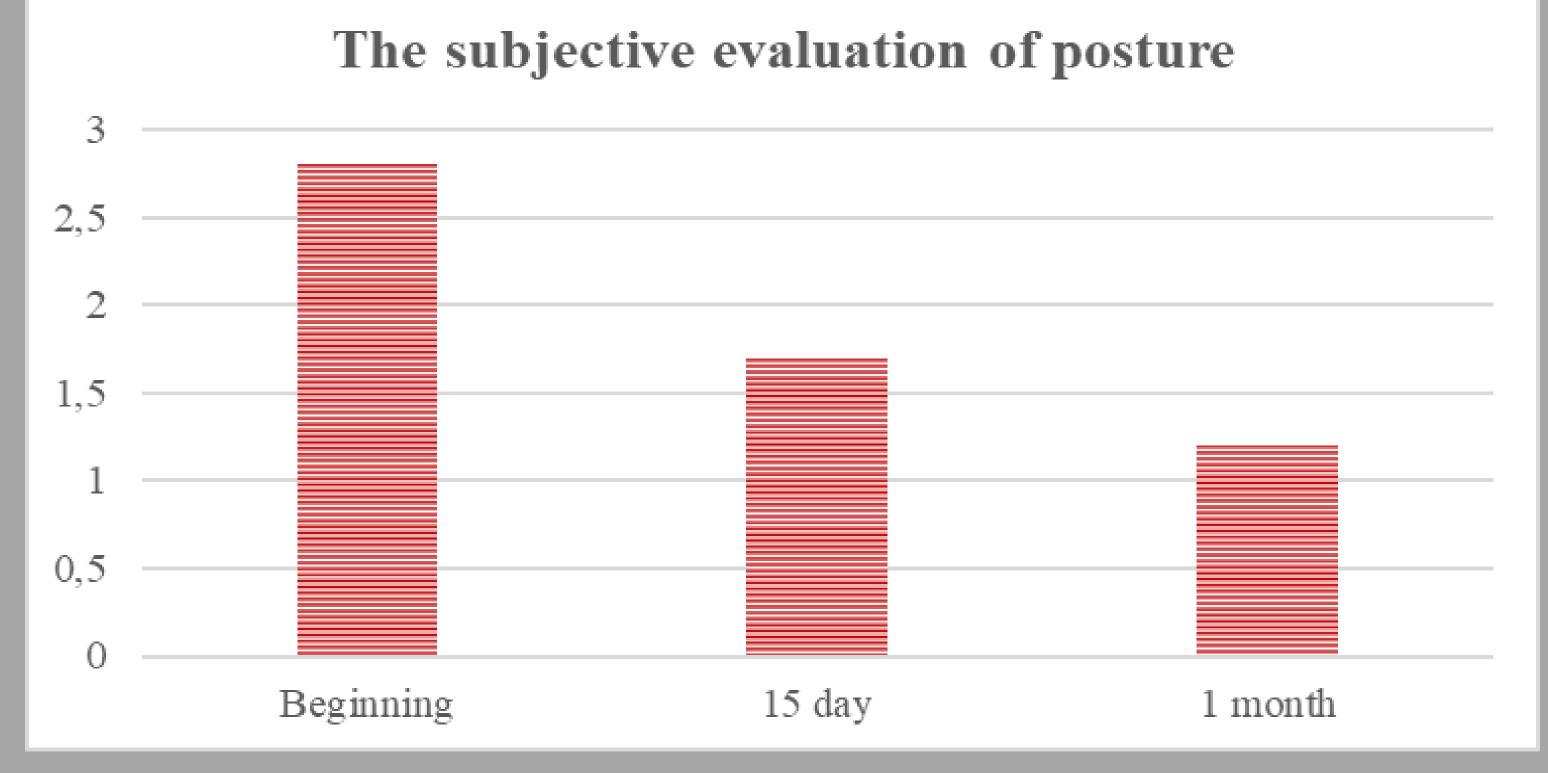


Fig.1Graphical representation in changes in the subjective evaluation of posture

-3,5

Fig.4 Graphical representation of differences in changes in cervical muscle stiffness, evaluated with the Waltenberg test (sec)

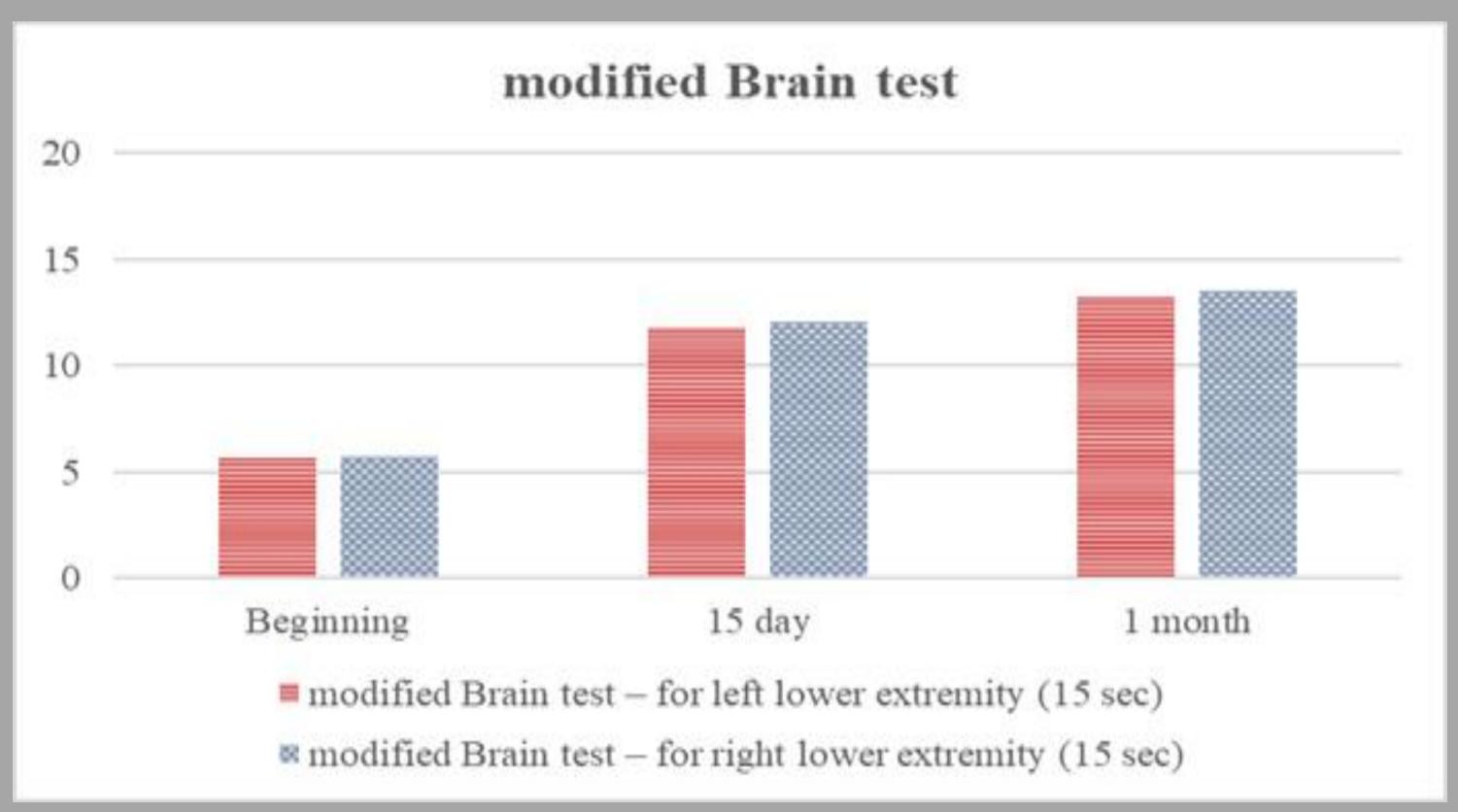


Fig.5Graphical representation in changes inmodified Brain test(number of repeats for 15 sec)

Differences in modified Brain test

Differences in evaluation of the posture

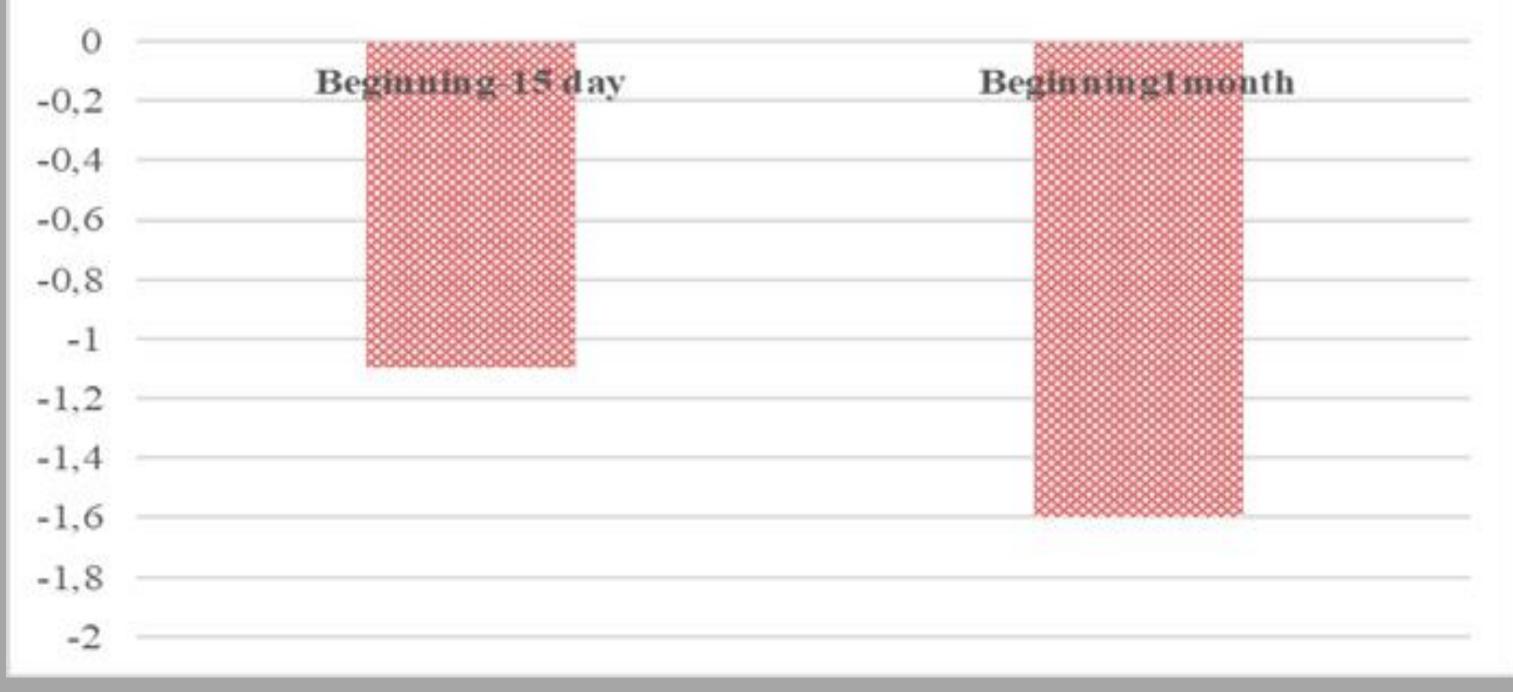


Fig.2 Graphical representation of differences in changes in evaluation of posture

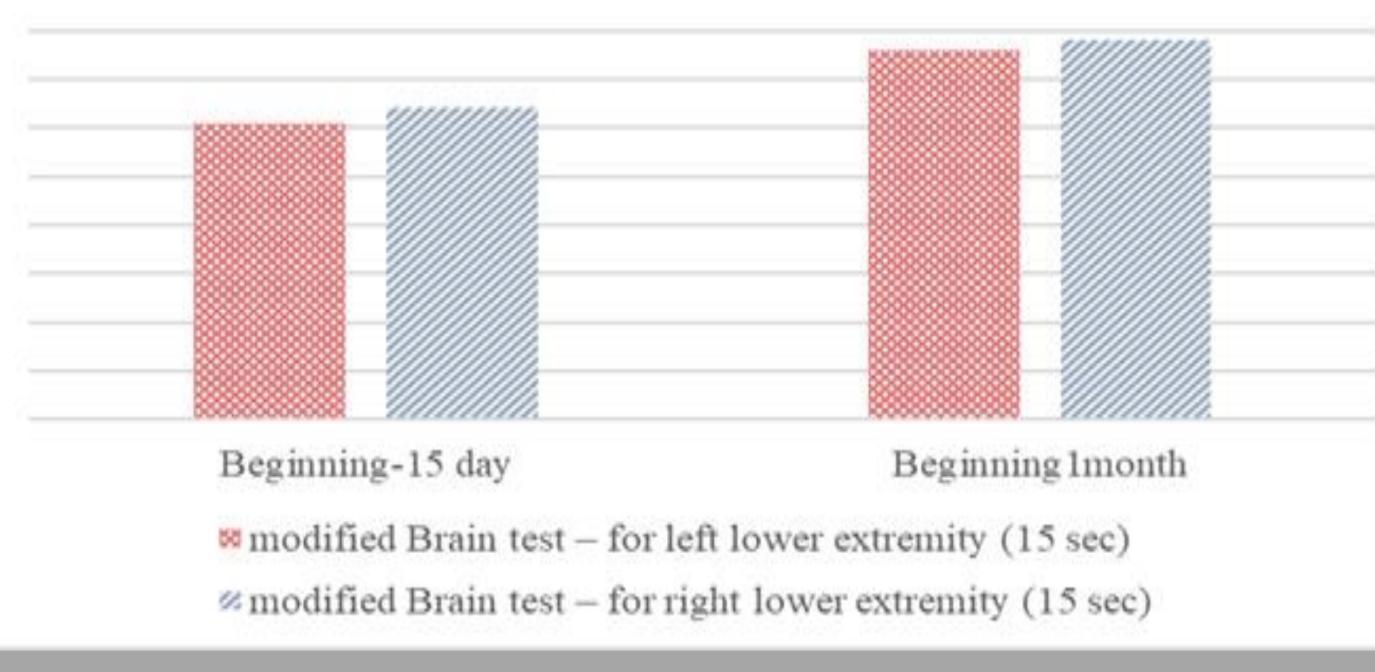


Fig. 6 Graphical representation of differences in changes in modified Brain test (number of repeats for 15 sec)