# NEUROREHABILITATION IN A PATIENT WITH PARKINSON'S DISEASE

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Fourth National Congress of the Bulgarian Society of Neurosonology and Cerebral Hemodynamics, October 5-7, 2018 Sofia, Bulgaria

## Introduction

The most common clinical condition that arises from the pathology of the basal ganglia is Parkinson's disease, in which the patient at rest shows tremor, difficult movement, slow motion, muscle stiffness. In the early stages, it is important to recognize: bradykinesia, tremor, and resting position. At the heart of the pathology, there is a loss of neurons that produce the chemical substance dopamine in the basal ganglia, which play an important role in the control of conscious movements.

## Method & Materials

72-year-old patient diagnosed with Parkinson's disease in the middle stage of the disease with signs of bradykinesia, tremor, limited range of movement. He has been treated with Levodopa / Carbidopa 250 mg / 25 mg as imitators of the action of dopamine and kinesitherapy to improve everyday activities. The kinesitherapy method includes: breathing exercises in the sitting position with emphasis on the expirium; exercises to reduce the rigidly increased muscle tone and improve the mobility of the spinal column and limbs; exercises to reduce tremor; to improve physiological syncynesias; to improve the position and control of the spinal muscles; for coordination, exercises to improve walking; exercises for relaxing mimic muscles and improving her mobility. To follow the effect of the therapy we use muscle tone tests - Ashworth scale, coordination test, static and dynamic equilibrium test, 1 min - walking (number of steps). Changes in the patient's motor activity are followed twice in conditions of home rehabilitation.

### Objective

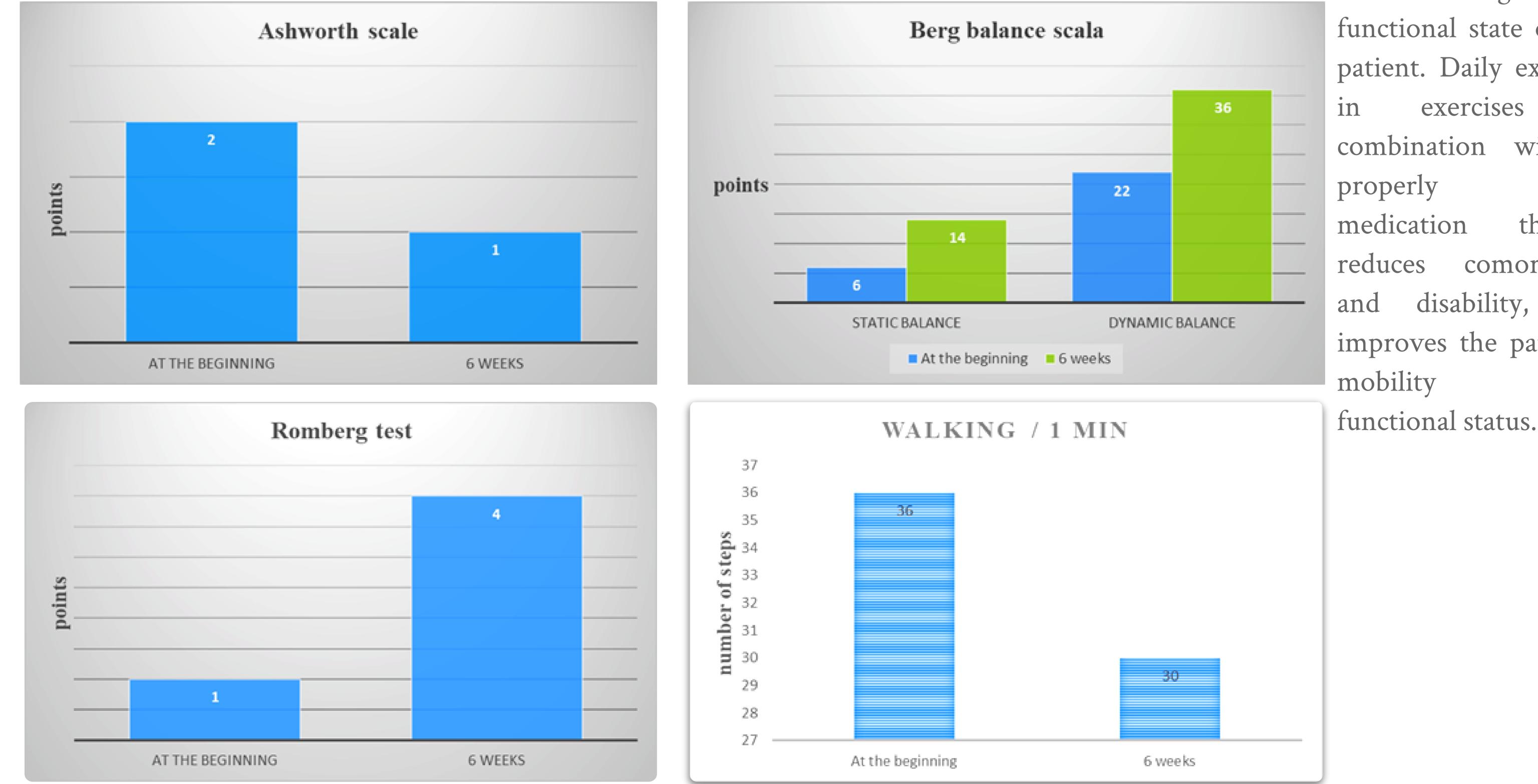
To show the effect of combined neurochemical in a patient with Parkinson's disease, which includes drug treatment and kinesitherapy to improve functional status.

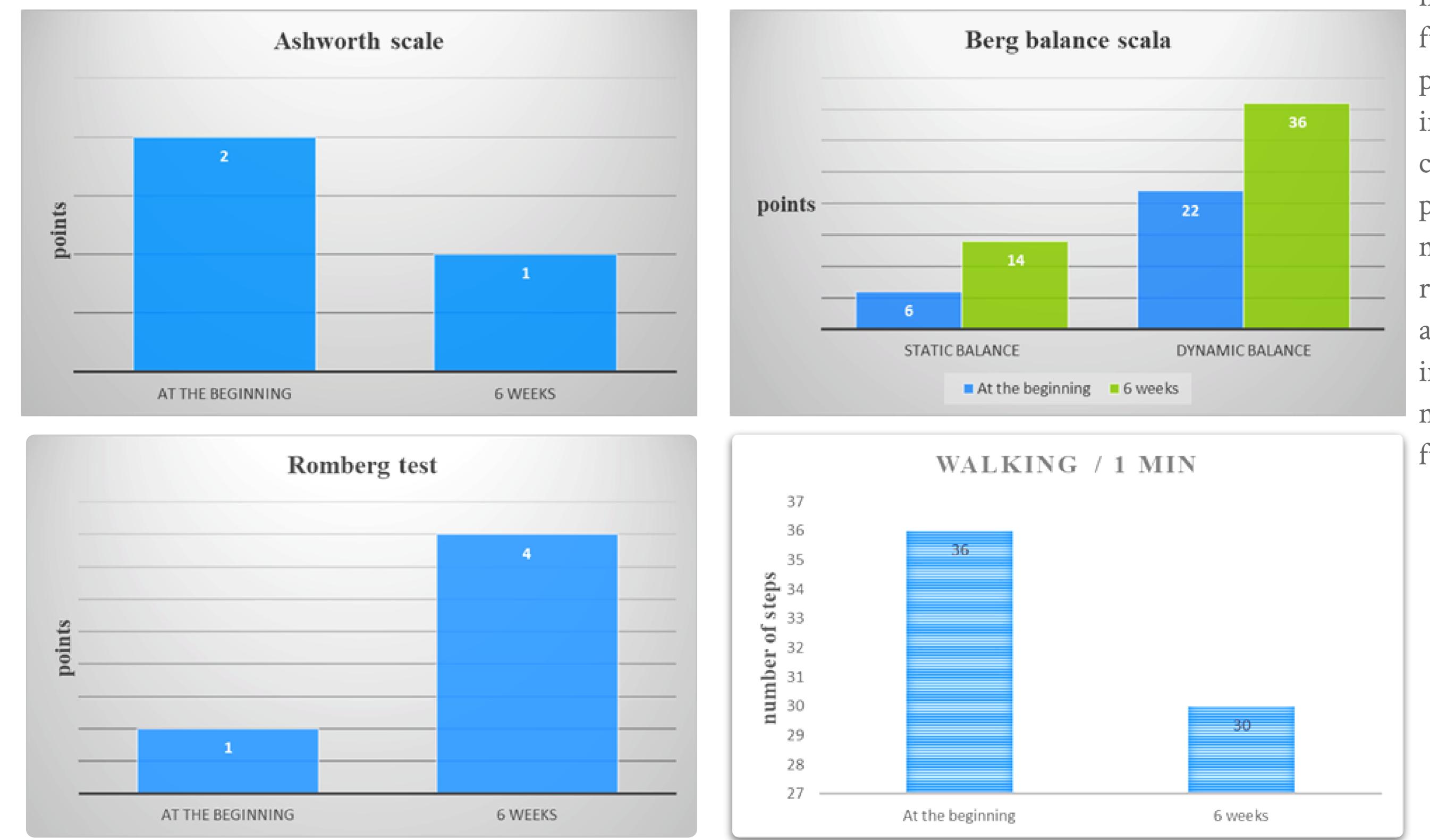
## Results

Taking Levodopa / Carbidopa therapy has confirmed significant improvements in motor performance after six weeks. Continuous performance of the exercises showed



significant improvement in flexibility, reduced rigidly increased muscle tone and improved mobility of the spinal column and limbs. Respiratory exercises give positive results in improving respiratory function and strengthening the external muscles of the body. The applied targeted exercises play a role in reducing tremor and improving physiological syndecision. Slowly executed coordination exercises and balance exercises affect the positioning and control of spinal muscles and improve walking.





#### Combined

neurorehabilitation is of individual character for the patient, and shows positive results in maintaining a better functional state of the patient. Daily exercise in exercises in combination with a dosed properly medication therapy comorbidity reduces disability, and and improves the patient's mobility and