

Neurorehabilitation in a case of Myasthenia Gravis

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INTRODUCTION

Myasthenia Gravis is a specific autoimmune disease of the postsynaptic membrane of the neuromuscular junction. In the area of the neuromuscular synapse, there is a blockage of the acetylcholine's receptors, which disables the creation of muscle action potential and transmission of the signal from the neuron to the muscle. The blockage is due to presence of antibodies on the acetylcholine's receptors.

OBJECTIVE

of the study is to trace the impact of the applied neuro-rehabilitation in a case of generalized adult form of myasthenia gravis.

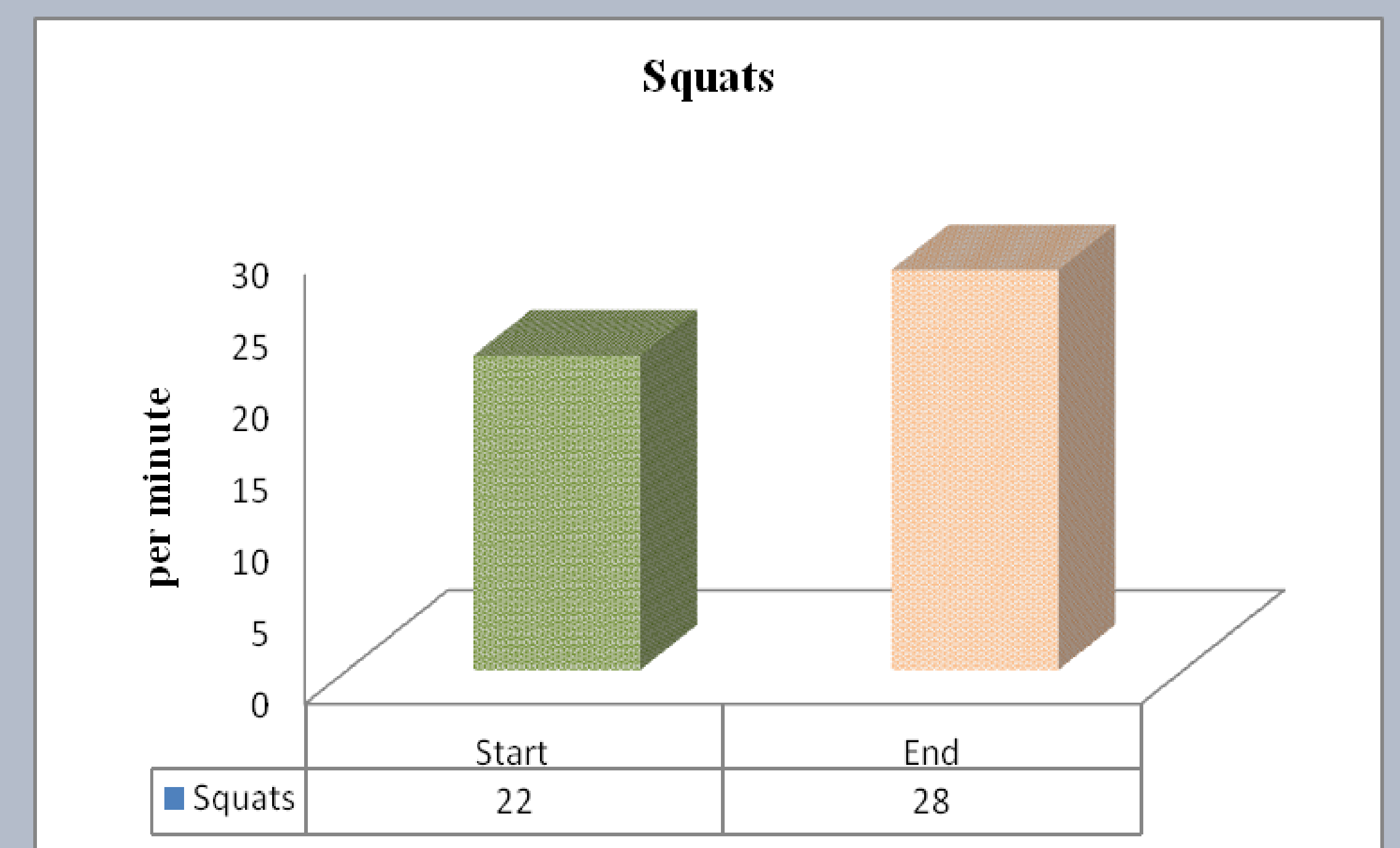
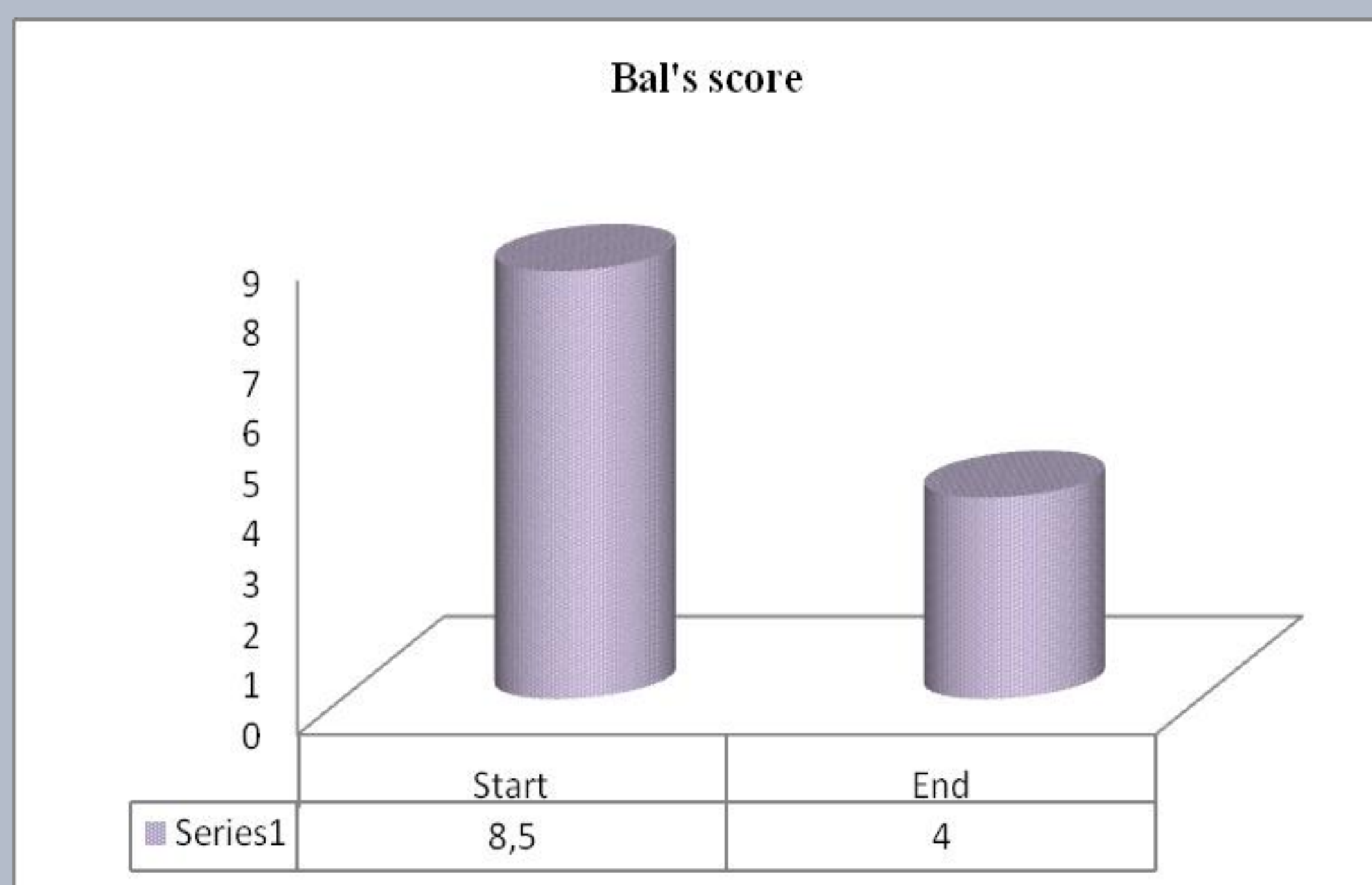
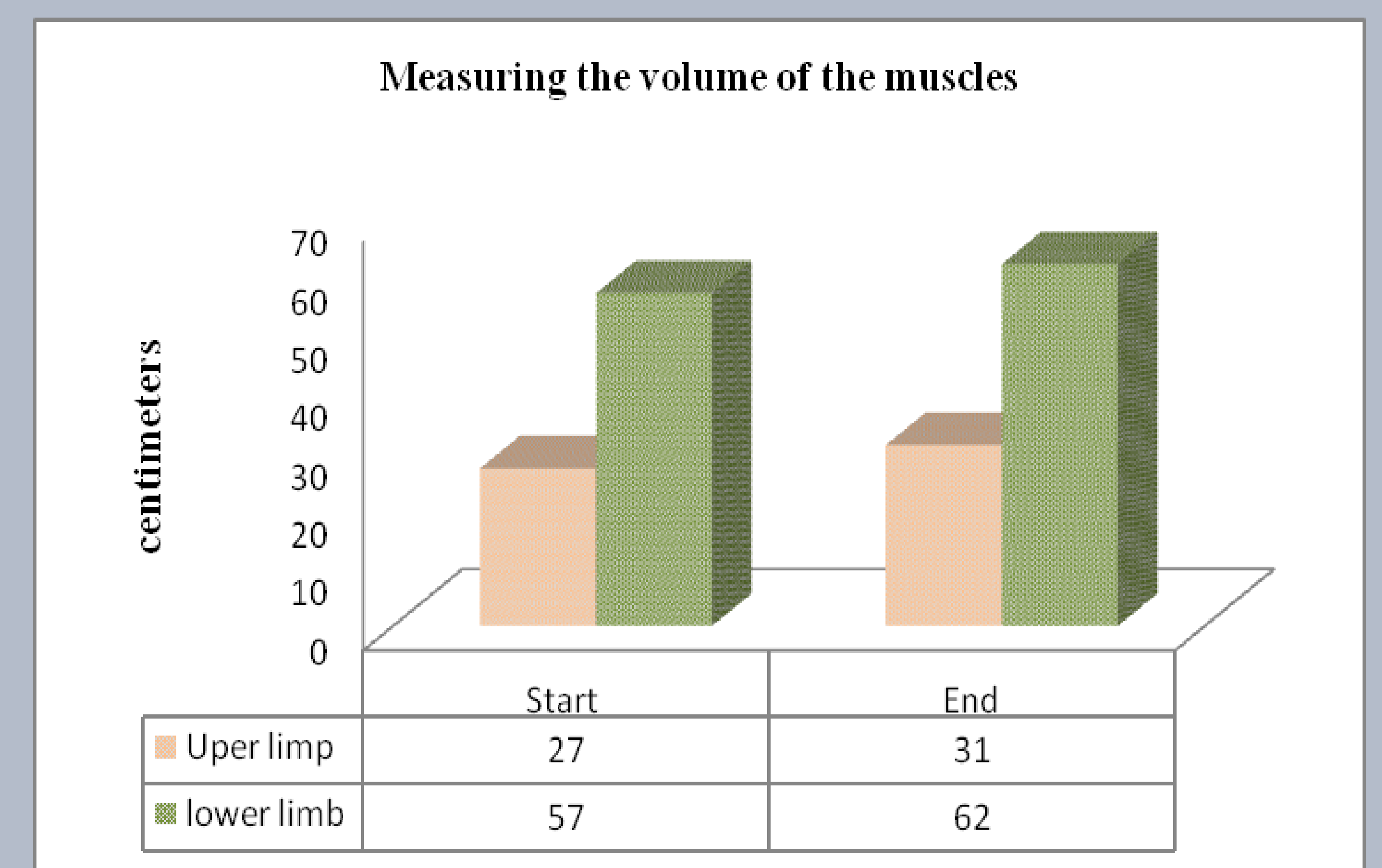
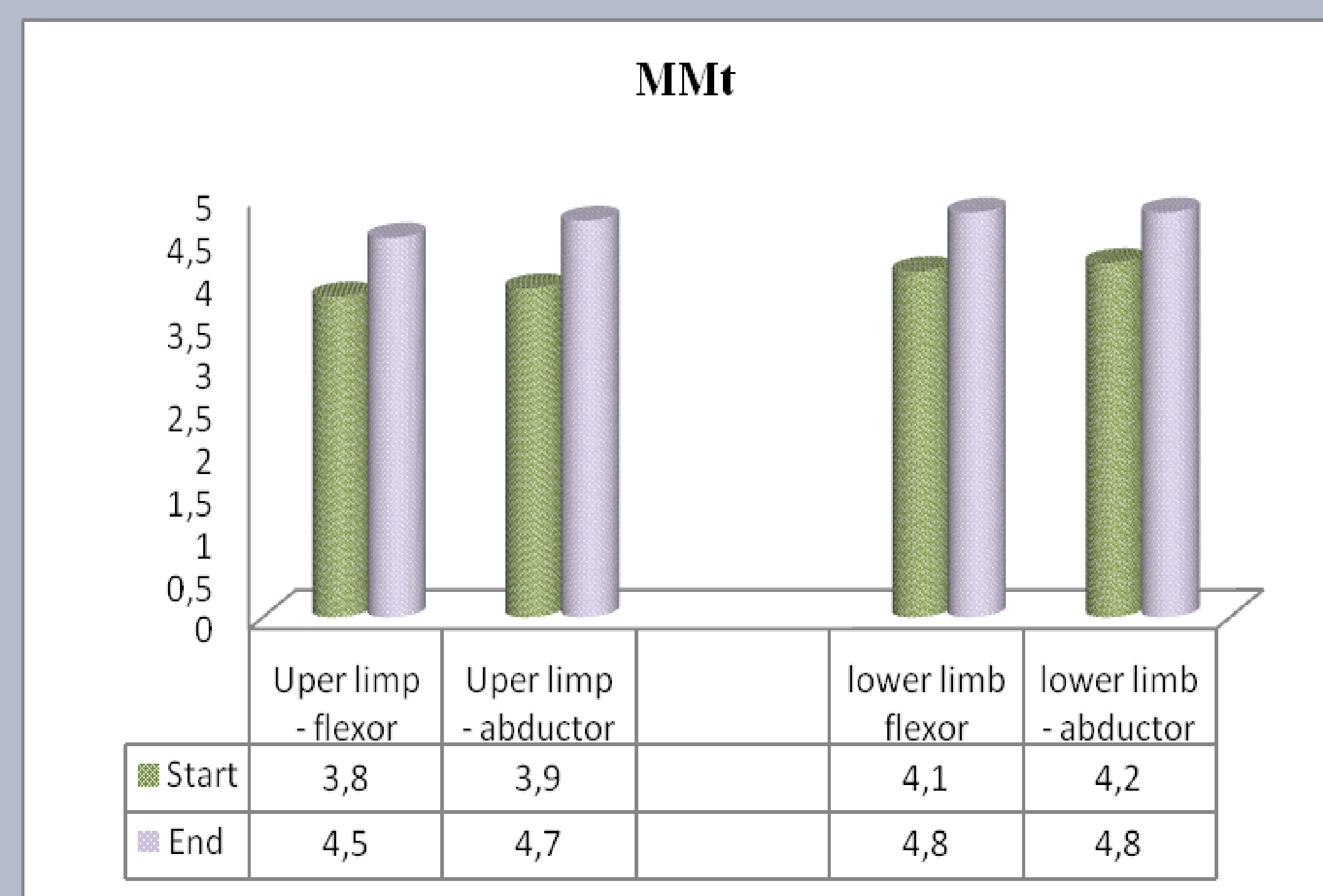
SOURCES AND METHODS

Subject of the case: 30 years old female patient with generalized adult form of myasthenia gravis (medium severe form). Clinical symptoms: fatigue, ptosis and diplopia, difficulty in speech, chewing and swallowing, nasal speech, muscle weakness in upper and lower extremities.

Therapy: Neurorehabilitation, medicament therapy – acetylcholinesterase inhibitor, Prostigmin, corticosteroids and kinesitherapy. Also, breathing exercises, passive-active exercises, analytical exercises, exercises for improvement of the muscle strength, balance and coordination in sitting and standing exercises and massages are being used. Muscle weakness test are being used to follow the effect of the applied therapy – MMT, measuring the volume of the muscles with centimeters, Bal's score of subjective complains – pain, squats per minute.

RESULT AND DISCUSSION

By measuring the muscle volume in centimeters and the muscle weakness test – MMT, improvement of muscle volume and strength were noticed, due to the systematical procedures of kinesitherapy and strength exercises for upper and lower extremities. The Bal's score of subjective complains is lower with decreasing of the pain and significantly improved results in the test of squats per minute, due to the improved strength of the lower extremities.



CONCLUSION

The efficiency of the directed and structured exercises is proved by the improvement of the functionality, aerobic capacity for exercising and muscle strength. The biggest benefit is reached by combined complex medicament therapy and multidisciplinary rehabilitation, in order to lower the clinical symptoms of the disease, lower the functional deficits and improvement of the functional performances. When properly directed and dosed, neurorehabilitation can prevent the secondary health issues like obesity, coronary heart disease and osteoporosis.