

ELECTROMYOGRAPHIC (EMG) PECULIARITIES OF NEUROMUSCULAR TRANSMISSION DAMAGE IN PATIENTS WITH MYASTHENIA GRAVIS (MG) AND LAMBERT-EATON SYNDROME (LES)

Nana Kvirkvelia^{1,2}, Roman Shakarishvili^{1,2}, Rusudan Nikolaishvili¹, Maia Jibladze¹,
Nino Mikava¹, Nino Khizanishvili¹

¹*Neuromyology, Petre Sarajishvili Institute of Neurology, Georgia*

²*Faculty of Medicine, Ivane Javakhishvili Tbilisi State University, Georgia*

n.kvirkvelia@yahoo.com

Objectives: to reveal different pathogenic mechanisms reflecting EMG correlates of MG and LES.

Methods: 89 MG and LES patients were EMG investigated. The functional state of neuromuscular transmission was determined by the decrement of M-response amplitude and area during the stimulation of different frequency. While stimulating with low frequencies, the determination of the decrement of the amplitude and area of the fifth M-response has been made by comparing the appropriate parameters of the first M-response and every next M-responses with the previous.

Results: In patients with MG during the stimulation of low frequencies, the most significant decrement of the M-response was found between the second and first and the third and second responses. In patients with LES the decrement of M-response was manifested in all five responses toward the previous ones.

Conclusion: The EMG peculiarities manifested during the stimulation with low frequencies in MG and LES explain different pathologic mechanisms of these two diseases. In this thesis the revelation of EMG peculiarities of human synaptic diseases will promote timely diagnostic and adequate therapy of these pathologies.

Key message: EMG data of MG and LES will help to correctly diagnose these diseases and timely apply adequate therapy.