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*Myasthenia Gravis: Neuromuscular Junction What's Your Function?*

This presentation is intended to provide information about Myasthenia Gravis. It will include background information on the neuromuscular junction, common symptoms, pathophysiology, common medical treatments and the speech-language pathologist's role in behavioral therapy.

Myasthenia Gravis (MG) is an autoimmune disorder that effects the neuromuscular junction, the chemical synapse between a motor neuron and a muscle fiber. Electrical impulses are sent from neurons to muscles, via the neuromuscular junction, leading to muscle contraction. The autoimmune response associated with MG attacks the acetylcholine receptors which collect acetylcholine, a chemical released by neurons to trigger muscle contraction. This disorder is highly variable but the hallmark symptom is muscle weakness which worsens with use and improves with rest. The most common symptom of MG is drooping of the eye, or ptosis, caused by ocular muscle weakness. A cure has not been discovered for MG, therefore treatment focuses on management of the symptoms. Treatment is also patient centered due to the large variability in MG symptoms and severity. People with MG will take medication, such as cholinesterase inhibitors and corticosteroids, for the duration of their lives. However, due to advances in critical care and disease management, people with MG have normal life expectancies.

Speech-language pathologists help with the management of more severe cases of MG when muscle weakness results in a swallowing disorder, or dysphagia. A speech-language pathologist can introduce compensatory strategies for the patient to help with tongue mobility, chewing and strengthening of oral and pharyngeal muscles necessary for swallowing. Additionally, MG can cause flaccid dysarthria, a motor speech disorder, characterized by muscle weakness and reduced tone. This presentation will present the background knowledge necessary to better understand MG with a concentration on the speech-language pathologist's role in management.