

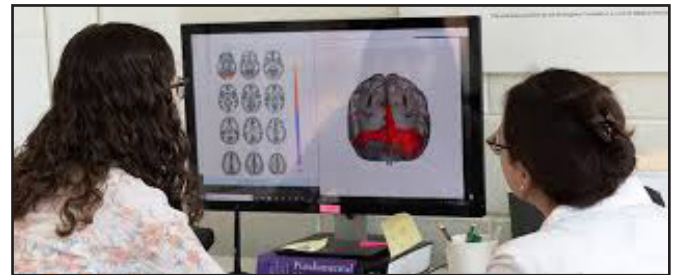
High Cervical Disc Herniation (C3-C4) With Superimposed Myasthenia Gravis In A 38-year Old Female: A Case Report

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Abstract:

Myasthenia gravis and High cervical disc herniation are uncommon diseases and rarely occurs at the same time. Each condition is caused by different etiologies and pathophysiology. We report a case of a 38-year old Filipino female who was admitted due to head drop. She experienced bowel and bladder incontinence and progressive proximal muscle weakness for nine months and eventually developed cranial muscle symptoms like dysphagia, dysphonia and ptosis. She was admitted as a case of cervical spine spondylosis but worsened after physical therapy despite IV steroids. Positive prostigmine test and repetitive nerve stimulation test confirmed presence of concomitant Myasthenia Gravis. In conclusion, we describe here a case of high cervical cord compression with superimposed myasthenia gravis. That the pattern of weakness caused by the spinal cord lesion can hide the classic fatigable pattern of weakness in myasthenia gravis. The presence of cranial muscle involvement and worsening of weakness after physical therapy favors myasthenia gravis. Early diagnosis of concurrent myasthenia and initiation of proper treatment helps in preventing possible complications that can prolong hospitalization in patients with high cervical cord compression. A 51-year-old Asian woman had been having drooping of the left eye for 6 months. She subsequently developed diplopia and weakness in both arms and legs. At that time, brain MRI and contrast-enhanced chest CT did not show any pathology. The results of pulmonary function test excluded respiratory weakness and of motor nerve conduction revealed no significant changes. Her AChR antibody was elevated at 18 nmol/L (reference range, <0.30 nmol/L). ESR was raised at 40 mm/h (reference range, 0–20 mm/h), other inflammatory markers (included WBC, CRP, and RA factor) were normal. She was diagnosed as having MG, and had been started on oral pyridostigmine bromide (an anticholinesterase). The drug was halted after only 4 weeks, because of the digestive side effects (nausea and abdominal cramping). She was unwilling to take immu-



nosuppressant drugs worrying the likelihood of weakening body defenses. The patient only received acupuncture in attempt to enhance muscle strength over the past 4 months. However, her symptoms progressively deteriorated with difficulties climbing stairs, and managing household chores. A further rise in AChR antibody titer was noted from 18 to 25 nmol/L. The chiropractic treatment focused on correcting the spinal dysfunction and releasing the nerve interference from degenerative spondylosis. Contact specific, high-velocity, low-amplitude adjustment, namely, Diversified Chiropractic Technique, was applied to the dysfunctional sites of the lower cervical and lower lumbar spine three sessions a week.

Biography:

Godard Espiritu Artajos, MD has completed his medical degree at age 26 years from the University of Santo Tomas Faculty of Medicine and Surgery. He is currently a Senior Resident-in-training under the Adult Neurology Program of the East Avenue Medical Center Department of Neurosciences, a tertiary government hospital in the heart of the Philippines. He aspires to pursue Neurophysiology fellowship abroad and go back to serve the Filipino people.

Publication of speakers:

1. Scoppetta C, Onorati P, Eusebi F, et al. "Autoimmune myasthenia gravis after cardiac surgery". *J NeurolNeurosurg Psychiatry* 2003; 74:392-3. 10.1136/jnnp.74.3.392.
2. Pavlov VA, Tracey KJ. "The vagus nerve and the inflammatory reflex-linking immunity and metabolism". *Nat Rev Endocrinol* 2012; 8:743-54. 10.1038/nrendo.2012.189.

Neurosurgery Webinar | September 17 2020 | London, U.K

Citation: Godard E. Artajos; High Cervical Disc Herniation (C3-C4) With Superimposed Myasthenia Gravis In A 38-year Old Female: A Case Report ; Neurosurgery Webinar; September 17 2020; London, UK.