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MYAESTHENIA GRAVIS: A PAIN IN THE NECK

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Background:

- Myasthenia gravis is chronic autoimmune disorder that causes weakness in the skeletal muscles, which are responsible for breathing and moving parts of the body, including the arms and legs
- The name myasthenia gravis, which is Latin and Greek in origin, means "grave, or serious, muscle weakness."
- It is most frequently associated with antibodies against acetylcholine receptors (AChR) in the post-synaptic motor end plate
- A second form of myasthenia gravis, usually seen in young women, involves antibodies against muscle-specific tyrosine kinase (MuSK)
- The hallmark is muscle weakness which gets worse on exertion and better with rest
- It is the most common disorder of the neuromuscular junction, with an annual incidence of 0.25-2 patients per 100 000
- Fifteen to 20% of myasthenic patients are affected by myasthenic crisis at least once in their lives
- Myasthenic crisis is a complication of myasthenia gravis characterized by worsening of muscle weakness, resulting in respiratory failure that requires intubation and mechanical ventilation.
- Advances in critical care have improved the mortality rate associated with myasthenic crisis

Case Report:

- A 70 year old Indian male presented with neck pain for 2 weeks
- Associated with pain in the bilateral shoulder girdles and mild weakness on trying to lift his arms
- He was not able to comb his hair or lift the head to look up after walking few steps
- He had no significant past medical history.
- Physical examination revealed subtle left sided ptosis but ocular movements were full
- There was no facial droop or tongue deviation
- Neck movements and muscle tone were normal but there was mild weakness of the girdle muscles
- He was admitted to neurology for further management.
- Laboratory test revealed positive ANA anti-AChR and anti-acetylcholine receptor Ab was 50
- Rapid nerve stimulation showed significant decremental response
- He was started on pyridostigmine, IVIG and oral prednisone and showed slight improvement
- A day later, he went into myasthenia crisis with type 2 respiratory failure and respiratory acidosis
- He was intubated and put on ventilatory support
- He was then weaned off , recovered and then was sent for further rehabilitation

Discussion:

- A GP had been treating these symptoms of neck pain almost for 1 week as cervical spondylosis
- MG may affect any skeletal muscle. Muscles that control eye and eyelid movement, facial expression, and swallowing are most frequently affected
- Therapies are directed towards reducing and improving muscle weakness, improving life expectancy
- Along with detailed clinical evaluation, anti-acetylcholine receptor Ab titre and nerve conduction study are helpful in establishing the diagnosis
- These patients may develop respiratory failure requiring intubation and mechanical ventilation, and may also need nasogastric feeding if dysphagia occurs
- Treatment options include like thymectomy (thymoma), steroids, anticholinesterase (mestinon and pyridostigmine), immunoglobin and plasmapheresis

Conclusions :

- Physicians should perform careful physical examination for all patients presenting with muscle weakness
- This would enable early detection of atypical presentation of myasthenia gravis and commence early appropriate therapy