Medications

- Heparin injections 5,000 units every 8 hours
- Pyridostigmine bromide (Mestinon) 60 mg 3 x day

Lab Values/Diagnostics

- CBC and CMP all WNL
- CT of brain without contrast showed no remarkable imaging

Demographic Data

Date of Admission: 03/24/2022
Admission Diagnosis/Chief Complaint: Myasthenia gravis
Age: 34 years old
Gender: Female
Race/Ethnicity: Caucasian
Allergies: cephalexin and vancomycin
Code Status: Full Code
Height in cm: 160 cm
Weight in kg: 100.2 kg
Psychosocial Developmental Stage: Patient's ability to communicate is appropriate for stated age
Cognitive Developmental Stage: Patients cognitive level is appropriate with patients stated age.
Braden Score: 21

Admission History

Patient came to the ED on 03/24/2022 with upper extremity weakness, dysphagia, and hoarse voice. Patient states that these problems occurred when she woke up on 03/24/2022. Patient explains the weakness is and the points to her throat when asks about the dysphagia and hoarse voice. Patient describes these occurrences as uncomfortable and unbearable. Patient says there is no factors that cause the problems to be worse. The patient hasn't tried any methods to relieve the weakness, dysphagia, and hoarse voice. Patient says the severity is a 9/10.

Medical History

Previous Medical History: ADHD, anxiety, depression, gestational diabetes mellitus, history of genital warts, and hyponatremia.

Prior Hospitalizations: Caesarean section and the date is unknown.

Previous Surgical History: Upper endoscopy (2019), genital wart laser conization (2012), caesarean section (date unknown), dental implants (date unknown).
Social History: Former 1 pack/day smoker for 15 years, no alcohol use and denies any drug use.

Pathophysiology

Disease process: Patient has a past diagnosis of myasthenia gravis. Myasthenia gravis is characterized by muscle weakness and fast tiredness in any of your voluntary muscles. A breakdown in the regular communication between neurons and muscles causes it. Myasthenia gravis is more common in women, but can affect men as well, and can affect women at any age. Women usually are diagnosed with this disease by age 40, and men develop myasthenia gravis 60 years and older (Fichtner et al., 2022).
S/S of disease: Myasthenia gravis signs and symptoms are muscle twitching of the eyes, impaired speaking, dysphagia, ptosis, and weakness in the limbs and neck (Capriotti & Frizzell, 2020). My patient came into the ED with dysphagia, weakness of her upper extremities, and hoarse voice.
Method of Diagnosis: The main methods of diagnosis include imaging (CT and/or MRI of brain), neurological examination (reflexes, strength, muscle tone, coordination, sense of touch, balance). Antibody tests, repetitive nerve stimulation, and EMG testing may be done as well. There were no abnormal labs or tests with the patient in the ED. Prior history of myasthenia gravis led us to know this is what the patient presented with.

Active Orders

- MRI orbit bilateral with and without contrast
- Swallow test

Physical Exam/Assessment

General: Patient is alert and oriented times 3. Patient is not in any known distress.

Integument: Patient's skin is pink and dry. There appears to be no lesions, bruises, or rashes. Patient's skin turgor is normal. Patient's Braden score is 21.

HEENT: Patient has normal head shape and size; the neck is supple. Patient has symmetrical, no tracheal deviations, non-palpable thyroid, non-palpable lymph nodes. Pallor, TM bilateral. External ears and nose atraumatic. Bilateral, symmetrical pinas, no lesions, bulges, keloids present. No drainage, purulent from the canals. Septum is midline, turbinates are moist and pink bilaterally and no visible bleeding or polyps present. Normal dentition is appropriate with her stated age.

Cardiovascular: Clear S1 and S2 sounds without any murmurs, gallops, or rubs. S3 and S4 were clear as well. Normal sinus rhythm. Peripheral pulses were 2+. Capillary refills were less than 3. No neck vein distension or edema.

Respiratory: There was no usage of the accessory muscles. All lobes in the lungs were clear, and equally, bilateral air entry. There were no rales, wheezes, or rhonchi noted.

Genitourinary: Patient's urine was amber yellow color with no odor. Inspection of patient's genitals does show multiple genital warts and scaring from patient's laser removal of warts back in 2012. No complaints if pain when urinating. Patient is not on dialysis.

Musculoskeletal: Patient's neurovascular status is normal. ROM of all 4 limbs is equal and WDL. Patient does not have any supportive devices. Patient's strength 5/5 and 5/5 but is quick to show signs of fatigue due to upper extremity weakness. Patient does not need ADL. Patient's fall score is a 1, very low fall score. Patient is independent and does not need help with equipment or assistance to stand and walk.

Neurological: Patient's orientation is WDL. Patient's mental status was coherent. Equal PERRLA is noted. Patient's speech was very clear and understandable. Patient's sensory and LOC is WDL.

Most recent VS (include date/time and highlight if abnormal): BP 161/118, P 106, R 18, Temp 98.6/orally, SpO2 100% (room air).

Pain and pain scale used: Patient denies any pain as of 03/24/2022.

Nursing Diagnosis 1	**Nursing Diagnosis 2**	**Nursing Diagnosis 3**
Ineffective airway clearance related to intercostal weakness as evidence by dysphagia.	Impaired physical activity related to voluntary weakness as evidence by upper extremity weakness.	Risk for aspiration related to difficulty swallowing as evidence by weakness of the esophageal muscles.
Rationale Patient was diagnosed with myasthenia gravis. One of the main side effects of this disease is dysphagia and muscle weakness.	**Rationale** Patient showed signs of fatigue when testing her muscle strength in the upper extremities could lead to impaired physical activity.	**Rationale** Patient came to ED with complaints of dysphagia which could lead to aspiration.
Interventions **Intervention 1:** Patient will maintain a clear airway as evidence by normal breath sounds, and normal respirations. **Intervention 2:** Patient will identify and avoid specific factors that may inhibit effective airway clearance.	**Interventions** **Intervention 1:** Patient will exhibit tolerance during physical activity. **Intervention 2:** Patient will remove all rugs from home which could lead to a fall hazard.	**Interventions** **Intervention 1:** Patient will be NPO until swallow test is done. **Intervention 2:** Patient will have HOB always elevated.
Evaluation of Interventions Patient had clear normal breath sounds and normal respirations. Patient was able to maintain an effective airway and avoided overline triggers.	**Evaluation of Interventions** Patient was able to show improved strength and was active in activities at home. Patient also removed rugs from home.	**Evaluation of Interventions** Patient returned to a normal diet after swallow test was confirmed normal. Patient was able to be discharged and able to lay flat.

References (3) (APA):

Capriotti, T. & Frizzell, J.P. (2020). *Pathophysiology: Introductory concepts and clinical perspectives.* (2nd ed.). F.A. Davis Company.

Fichtner, M. L., Hoarty, M. D., Vadysirisack, D.., Munro-Sheldon, B., Nowak, R.J., & O'Connor, K.C. (2022). Myasthenia gravis complement activity is independent of autoantibody titer and disease severity. *PloS One*, *17*(3), e0264489. https://doi.org/10.1371/journal.pone.026448

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2018). *Mosby's diagnostic and laboratory test reference* (14th ed.). Mosby.

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