Medications

Midodrine- The Pharmacological class of this drug is an Alpha-adrenergic agonist. The patient uses this medication because of her chronic orthostatic hypotension, which helps raise her blood pressure. The nurse should monitor renal and hepatic functions before administering the mediation. They should also assess the heart rate of the patient.
Ceftriaxone- The Pharmacological class of this drug is a third-generation cephalosporin. The patient is taking this antibiotic because she has recurrent urinary tract infections. The nurse should not be given this medication by IV since it contains calcium. The patient is also allergic to penicillin, and the nurse should be careful when administering the antibiotic due to the risk of cross-sensitivity.
Diltiazem- The Pharmacological class of this drug is a calcium channel blocker. The patient is taking the medication because she has arterial fibrillation with a rapid ventricular response. The nurse should monitor the patient's heart rate and rhythm by continuous ECG.
Docusate- Pharmacological class: Surfactant. The patient complained of not going to the bathroom, so she has been prescribed the medication. Before administering the medication, the nurse should assess the patient for laxative abuse syndrome.
Metoprolol- Pharmacological class: Beta-adrenergic blocker. The patient is using this medication due to her having tachycardia. The nurse should assess hepatic impairment due to the patient being elderly.
Pantoprazole- The Pharmacological class of this drug is a proton pump inhibitor. The patient is using this medication because she has a history of gastroesophageal reflux disease. The nurse should know that since the medication is a delayed released tablet, the nurse should tell the patient not to crush, chew, or break the tablet.

Demographic Data

10/09/21

Date of Admission:

Admission Diagnosis/Chief Complaint: Syncope from chronic orthostatic hypotension

Age: 96 years old, 10/09/1925

Gender: Female

Race/Ethnicity: Caucasian

Allergies: Pollen, Ceftin, penicillin, and quinidine

Code Status: DNR

Height in cm: 162.5 cm

Weight in kg: 44.2 kg

Psychosocial Developmental Stage: The patient is in the last stage of the Psychosocial

Pathophysiology

Disease process: Orthostatic hypotension is when a patient stands up, and their blood pressure drops significantly. The arterial baroreceptors (receptors that stimulate the SNS to vasoconstriction) take time to adjust when the clients go from sitting to standing (Capriotti, 2020). When a patient has orthostatic hypotension and stands up, there is a delay in arterial vasoconstriction, and the patient blood pressure temporarily falls (Capriotti, 2020). Usually, when a patient stands, the baroreceptors stimulate the SNS to vasoconstrict arteries and increase heart rate in response to the dropped blood pressure (Capriotti, 2020). The blood pressure then immediately readjust as the person stands up (Capriotti, 2020).

S/S of disease: Some of the signs of orthostatic hypotension are feeling faint, dizzy, or weak (Capriotti, 2020). Sometimes patients cannot stand and experience syncope like the patient experienced (Capriotti, 2020).

Method of Diagnosis: Orthostatic hypotension can be diagnosed by doing orthostatic vital signs. If the patient has a drop of 20 mm Hg in systolic or a drop of 10 mm Hg in diastolic blood pressure, which is a sign of the condition. Also, blood tests, ECG or EKG, echocardiogram, stress test, tilt table test, and valsalva maneuver can all diagnose orthostatic hypotension.

Treatment of disease: The patient is taking midodrine for her orthostatic hypotension. Midodrine is used to treat low blood pressure in patients who have symptoms like dizziness when going from sitting to standing. The patient is also taking diltiazem and metoprolol to help lower her heart rate because when she goes from standing to sitting, her heart rate also spikes.

Lab Values/Diagnostics

Abnormal lab values; Low(L) and High(H)

- Ca- 8.2(L)(8.4-10.0 mg/dL)
  - The patient has chronic kidney disease which can cause calcium to be low.
- BNP-684(H)(
  - The patient has pulmonary hypertension which causes the BNP to be high.
- RBC- 3.04(L)(3.90-4.98 mill/cumm)
  - The patient has chronic kidney disease which causes her RBC to be low.
- Hgb – 104(L)(12.0-15.5 gm/dL)
  - The patient has iron deficiency anemia which causes her Hgb to be low.
- Hct- 31.3(L)(35-45 %)
  - The patient has anemia which cause low Hct.

Diagnostics

- Electrocardiography (EKG)
  - EKG measures the electrical signals in the patient's heart. The patient has arterial fibrillation with a rapid ventricular response, which can be seen on the monitor. When the patient goes from sitting to standing, her heart rate also goes into tachycardia.

Admission History

The patient was found unconscious on 10/09/21 by the employees at the assisted senior living where she lived. The patient stated, "I don't really remember anything, but I was feeling lightheaded throughout the day." The patient said that she was feeling lighted headed every time she started to walk. The only characteristic the patient mention is feeling lightheaded. When she sat down, she felt better, and when she walked around, her lightheadedness got worse. The only thing that helped the client was sitting down. The patient is already taken midodrine for her orthostatic hypotension.

Medical History

Previous Medical History: Arterial fibrillation with rapid ventricular response, Chronic orthostatic hypotension, and syncope, Hypothyroidism, anxiety, coronary artery disease, chronic kidney disease, anemia due to iron deficiency, recurrent urinary tract infections, Raynaud diseases, pulmonary hypertension, and gastroesophageal reflux disease.
Prior Hospitalizations: syncope (08/07/2021)

Previous Surgical History: Pacemaker implantation

Social History: N/A

Active Orders

- The patient is taking ceftriaxone due to her having recurrent urinary tract infections.
- The patient must get orthostatic vitals every 3 hours due to her chronic orthostatic hypotension.
- The patient is continuously monitored on an Electrocardiography due to her heart rising every time she stands up.

Physical Exam/Assessment

General: The patient is alert and orientated to person, place, time, and situation (x4). The patient did not seem to be in any distress. The patient was slightly sluggish and preferred to sleep a lot. The patient feeling sluggish can be due to her feeling lightheaded from her chronic orthostatic hypotension. The patient's overall appearance was ordinary.

Integument: The patient skin was pink, warm, and intact. The patient had multiple bruises along her arms, hands, and legs. The patient has a Braden score of 15. The patient is at a mild risk for skin breakdown.

She currently had no drains.

HEENT: The patient's head and neck appeared to be midline with no deviation, and her ears were intact and symmetrical. She also had hearing aids in both ears, but one of them died. The patient had moderate difficulty hearing me due to one of her hearing aids dying. There was currently no drainage seen. The client's eyes appeared to be symmetrical with no drainage. The patient's dentures were in place, and her tongue appeared to be pink and midline.

Cardiovascular: S1 and S2 were heard. The patient had periods of tachycardia, and the monitor read 120-140 at times. The patient is diagnosed with arterial fibrillation with a rapid ventricular response. Peripheral pulses were palpable and bilateral in the brachial, radial, and carotid arteries. The posterior tibial, popliteal, and dorsal pulses were palpable and bilateral. Capillary refill was less than 3. It appeared to be no edema.

Respiratory: No lung sounds were clear as I listened to the patient. She also was not using accessory muscles, and I did not see any chest deformities.

Genitourinary: The patient's urine was slightly cloudy with a pungent smell. The patient has recurrent urinary tract infections. The patient's urine was also a dark yellow. The patient denied any pain or burning while urinating.

Musculoskeletal: Neurovascular status is intact and is in control. The patient was able to show me active ROM in the upper extremities but passive in the lower extremities. The client needs assistants with a walker to get around. The patient's strength is equal but weak in both upper and lower extremities, but they all were bilateral. The patient needs moderate assistance with activities of daily living. The patient is a high fall risk with a score of 85. The patient needs help with ambulation due to her chronic hypotension.

Neurological: The patient's lower and upper extremities are bilateral but also are weak. The patient is alert and orientated (x4). Mental status is appropriate for age. Speech is normal and audible. Sensory is intact, and no signs of loss of consciousness. The patient denied pain, paresthesia, and paralysis. All pulses were palpable and bilateral. The patient did not appear to be pallor.

Most recent VS (include date/time and highlight if abnormal): Pulse: 128, blood pressure 71/46, respiration 16, temperature 37.7, and oxygen saturation 97%.

Pain and pain scale used: The pain scale used is the numerical pain scale, and the patient denied having any pain.

Nursing Diagnosis 1	Nursing Diagnosis 2	Nursing Diagnosis 3
The patient has a high risk for falling related to her having chronic orthostatic hypotension, evidenced by a fall score of 85.	**The patient has impaired mobility related to chronic orthostatic hypotension, evidenced by feeling dizzy and faint upon rising.**	**The patient has a risk for injury related to her having chronic orthostatic hypotension, evidence by her recent episode of syncope.**
Rationale **The patient has a risk of falling due to her orthostatic hypotension because when she goes from sitting to standing, her blood pressure drops very low. Orthostatic hypotension can cause dizziness and syncope.**	**Rationale** **The patient has impaired mobility relates to her chronic orthostatic hypotension because she has limited independent movement. The patient relieves on her walker, and one person assists.**	**Rationale** **The patient has a risk for injury because she was admitted to the hospital for syncope due to her chronic hypotension.**
Interventions **Intervention 1: I instructed the patient to rise slowly when going from sitting to standing.** **Intervention 2: I walked using a gait belt when the patient wanted to ambulate to the bathroom.**	**Interventions** **Intervention 1: The patient will continue to use her walker as an assistant.** **Intervention 2: The patient will continue to use her call light to ask for assistance.**	**Interventions** **Intervention 1: The patient will continue to use her walker as an assistant.** **Intervention 2: The patient will continue to use her call light to ask for assistance.**
Evaluation of Interventions **The patient did not fall due to rising slowly and allowing me to assist her to the bathroom.**	**Evaluation of Interventions** **The patient continued to use her walker and called for assistance because she acknowledged her impaired mobility.**	**Evaluation of Interventions** **The patient did not have any injuries due to her using her call light when help is needed. She also used her walker when ambulating.**

References (3) (APA):

Capriotti, T. (2020). Davis advantage for Pathophysiology: Introductory concepts and clinical perspectives. F.A. Davis

Hinkle, J. L., & Cheever, K. H. (2018). *Brunner & Suddarth's textbook of medical-surgical nursing* (14th ed). Wolters Kluwer

Malarkey, L. M., & McMorrow, M. E. (2021). *Saunders nursing guide to laboratory and diagnostic tests*. St. Louis, MO: Elsevier/Saunders.