

Medications

Acetylsalicylic (Aspirin) 81 mg Daily to prevent future TIA
Pharmacological class: Nonsteroidal anti-inflammatory drug (Jones & Bartlett Learning, 2020).
Therapeutic class: Salicylates (Jones & Bartlett Learning, 2020).
Key nursing assessment: Assess the patient for signs and symptoms of pain, fever, and or inflammation (Jones & Bartlett Learning, 2020).
Carbidopa-Levodopa (Sinemet) 25-100 mg per tablet 2 tablets three times daily to treat symptoms of Parkinson's
Pharmacological class: Levodopa: Central nervous system agents, Carbidopa: Decarboxylase inhibitors (Jones & Bartlett Learning, 2020).
Therapeutic class: Decarboxylase inhibitors (Jones & Bartlett Learning, 2020).
Clonazepam (Klonopin) 0.5 mg nightly to treat rapid eye movement sleep-related behavior disorder (RBD) in Parkinson's disease
Pharmacological class: Benzodiazepines (Jones & Bartlett Learning, 2020).
Therapeutic class: Anticonvulsant, antipanic (Jones & Bartlett Learning, 2020).
Clopidogrel (Plavix) 75mg daily to prevent TIA
Pharmacological class: P2Y12 platelet inhibitor (Jones & Bartlett Learning, 2020).
Therapeutic class: Platelet aggregation inhibitor (Jones & Bartlett Learning, 2020).

Physical Exam/Assessment

Date of Admission: 09/06/2022
Admission Diagnosis/Chief Complaint: Weakness due to Parkinson's/Generalized Weakness
Age: 77 years of old
Gender: Male
Race/Ethnicity: Caucasian/Non-Hispanic or Latino
Allergies: Bandaging tape; causes a skin rash
Code Status: Full Code
Height in cm: 177.8cm
Weight in kg: 67.9kg
Psychosocial Developmental Stage: Integrity vs. Despair
Cognitive Developmental Stage: Formal Operations
Braden Score: 19
Morse Fall Score: 5
Infection Control Precautions: N/A
Patient does have foley catheter in due to urinary retention. Urine output was 9/3/22 which could be a symptom associated with Parkinson's disease.
Admission History: Patient states there is no discomfort upon palpation. No CVA tenderness noted unilaterally.

Pathophysiology

Disease process: Parkinson's disease is a progressively debilitating disease that grossly affects motor function (Holman et al., 2019). It is characterized by four primary findings: tremors, muscle rigidity, bradykinesia and postural instability (Holman et al., 2019). These findings occur due to overstimulation of the basal ganglia by acetylcholine (Holman et al., 2019). The secretion of dopamine in the body produces inhibitory and excitatory effects on the muscle (Holman et al., 2019). Over stimulation of the basal ganglia by acetylcholine occurs because degeneration of the substance results in decreased dopamine production (Holman et al., 2019). This allows acetylcholine to dominate, making smooth, controlled movements difficult (Holman et al., 2019). Treatment of Parkinson's disease focuses on increasing the amount of dopamine or decreasing the amount of acetylcholine in the client's brain (Holman et al., 2019).
5's of disease: Signs and symptoms of Parkinson's disease include fatigue, stooped posture, slow shuffling and propulsive gait, slow speech, rimmed/spill rolling tremors of the fingers, muscle rigidity, bradykinesia, masklike expression, and difficulty chewing and swallowing (Holman et al., 2019). Other findings associated with Parkinson's disease include orthostatic hypotension, flushing, and diaphoresis (Holman et al., 2019). Patients with Parkinson's disease may also experience drooling, dysarthria, progressive difficulty with ADLs, mood swings, and cognitive impairments like dementia (Hinkle & Cheever, 2022). This patient has experienced a shuffling gait, slow speech, and fatigue. The patient also has experienced dementia as a side effect of Parkinson's disease. Another symptom this patient has experienced from Parkinson's disease is difficulty chewing and swallowing. This patient has experienced clear signs of Parkinson's disease and has had difficulties with ADLs, which brought him into the emergency room. The patient is experiencing a decline in health due to his progression of Parkinson's disease.
Method of Diagnosis: There is no laboratory test to diagnose Parkinson's disease (Holman et al., 2019). Diagnosis of Parkinson's disease is based on manifestations of the disease and by ruling out other diseases (Holman et al., 2019). These manifestations include tremors, muscle rigidity, bradykinesia, and postural instability (Holman et al., 2019). The progression of Parkinson's disease is defined by the five stages of Parkinson's (Holman et al., 2019). Stage one is where unilateral shaking or tremors of one limb occurs (Holman et al., 2019). Stage two is where unilateral limb involvement occurs, making walking and balance difficult (Holman et al., 2019). Masklike face and slow shuffling gait inhibit the body while stage two occurs (Holman et al., 2019). Stage three includes physical movement, where movements are slowed down significantly, affecting walking more (Holman et al., 2019). In stage four, tremors can decrease, but akinesia and rigidity make the day-to-day task difficult. Stage five is the final stage of Parkinson's, where the client cannot stand or walk, is dependent on all care, and may exhibit dementia (Holman et al., 2019). These stages are how the progression of Parkinson's disease is determined.
Treatment of disease: Parkinson's disease is irreversible. However, there are treatments to slow the progression and delay the process of reducing the manifestations of Parkinson's disease. Treatment of Parkinson's includes improving mobility, enhancing self-care activities, improving bowel elimination, promoting nutrition, enhancing swallowing, encouraging the use of assistive devices, improving communication, supporting coping abilities, and promoting community-based or transitional care (Hinkle & Cheever, 2022). To improve mobility, a progressive program of daily exercise will help increase muscle strength, improve coordination, reduce muscular rigidity, and prevent contractures that occur when muscles are not used (Hinkle & Cheever, 2022). Some daily exercises that will improve daily living include walking, riding a stationary bicycle, swimming, and gardening (Hinkle & Cheever, 2022). Due to the progression of Parkinson's disease in this client, he can only go on short walks; however, he used to exercise regularly. The patient is currently doing a range of motion exercises to prevent contractures while in the hospital. Treatments to enhance self-care include encouraging, educating, and supporting the patient during ADLs to promote self-care (Hinkle & Cheever, 2022). The patient's wife states that she tries to allow the patient to do all ADLs that he can. Environmental modifications are necessary to compensate for functional disabilities (Hinkle & Cheever, 2022). Adaptive or assistive devices may be helpful (Hinkle & Cheever, 2022). The patient states he uses a cane or walker when he feels he needs it at home. A regular bowel routine may be established to encourage the patient to follow a regular time pattern. To improve bowel elimination (Hinkle & Cheever, 2022). The patient has not yet needed a bowel routine however will use laxatives when defecation does not occur naturally. In order to improve nutrition, a dietitian may be consulted regarding nutritional needs (Hinkle & Cheever, 2022). Patients may have difficulty maintaining their weight as it becomes difficult to chew and swallow as the disease progresses (Hinkle & Cheever, 2022). To enhance swallowing, the patient should be upright during meals (Hinkle & Cheever, 2022). A semi-solid diet with thick liquids is easier to swallow and should be used if the patient has trouble swallowing (Hinkle & Cheever, 2022). The patient does not have severe swallowing difficulties and follows a regular diet. The patient, however, does sit upright to eat. To encourage the use of assistive devices and occupational therapists can assist in identifying appropriate adaptive devices (Hinkle & Cheever, 2022). During the patient's hospital stay, an occupational therapist will evaluate the patient to establish the correct assistive device the client may need. In order to improve communication, a speech therapist may help design speech improvement exercises to assist the family and healthcare personnel in developing and using a method of communication that meets the patient's needs (Hinkle & Cheever, 2022). The patient has not had an alteration in speech. Therefore, a speech therapist has not yet been needed. To support coping abilities, encourage the patient to reach out to psychotherapy or medication therapy (Hinkle & Cheever, 2022). The patient does take Sertraline to improve his depression. In order to promote home, community-based, or transitional care, the patient should be evaluated in the home for adaptation and safety needs as well as compliance with the plan of care (Hinkle & Cheever, 2022). The client has not yet needed transitional care as he has not progressed to the fifth stage of Parkinson's disease. Treatment may also include several medications. Some medications include Dopaminergics, Dopamine agonists, Anticholinergics, Carvedilol O-methyltransferase inhibitors, Monoamine oxidase type B inhibitors, and Antivirals (Holman et al., 2019). Another commonly used medication for Parkinson's disease is a medication combination called Carbidopa-Levodopa (Hinkle & Cheever, 2022). This patient currently takes Carbidopa-Levodopa 25-100 mg per tablet, two tablets three times a day, to control the symptoms of Parkinson's disease. The patient also takes Clonazepam to treat rapid eye movement and sleep-related behavior disorder due to Parkinson's disease. The patient also uses Donepezil to treat dementia related to Parkinson's disease.

Lab Values/Diagnostics

Musculoskeletal: Extremities have full range of motion bilaterally. Hand grips strong bilaterally, pedal pulls equal bilaterally. Gait is shuffled due to Parkinson's disease, muscle rigidity noted due to Parkinson's disease. Patient used a walker and one assist to ambulate to the bed and chair. Patient is a fall risk with a score of five. Patients' strength is equal bilaterally, however is impaired due to Parkinson's disease.
Neurological: Patients LOC is alert and awake. Patient is oriented to person, place, time and time upon assessment, normal cognition upon assessment, speech is clear, MAEW and PERLA are present, strength equal bilaterally.
Most recent VS (include date/time and highlight if abnormal):
Temperature: 98.3F Respirations: 18 Heart rate: 72 Blood pressure: 133/70 Oxygen saturation: 96% on room air Time: 1100
Temperature: 98F Respirations: 20 Heart rate: 70 Blood pressure: 133/70 Oxygen saturation: 96% on room air Time: 1500
Pain and pain scale used: Patient rates his pain a zero out of ten on the number scale.
Prior Hospitalizations: N/A
Previous Surgical History: Endoscopy of The Colon, Prostate Surgery, Tonsillectomy
Social History: Smoking: N/A
Alcohol: Currently drinks alcohol on occasion
Drugs: N/A

Medical History

77-year-old male presented to OSF on 9/6 after experiencing generalized weakness, which has worsened since Monday. The patient states the onset of the weakness started on Monday, 9/5, and continued to decline. The patient says the location of the weakness is in the legs. The duration of the weakness has been constant for several days. The characteristics include not being able to walk or perform ADLs. The patient states

Active Orders

Due to urination retention with bladder scan of 492
BMP w/calcium total & CBC w/Diff: Due to possible electrolyte imbalances
OT/PT evaluate/treat: Due to generalized weakness, Parkinson's, unable to get out of bed, and possible placement.
Blood glucose test 4x daily before meals and at bedtime: Due to patient being diabetic
Telemetry monitoring: Due to acute neurologic event
Maintain foley catheter: Due to acute urinary retention
Maintain IV: Due to cardiac monitoring
Input & Output: (Routine) due to urinary retention
Up as tolerated: (Routine) pt. Is normally up independent at home
Vital signs: (Routine) Monitoring pt. status

<p align="center">Nursing Diagnosis 1</p> <p>Risk for injury related to Parkinson's as evidence by shuffling gait</p>	<p align="center">Nursing Diagnosis 1</p> <p>Impaired physical mobility related to Parkinson's as evidence by weakness</p>	<p align="center">Nursing Diagnosis 3</p> <p>Risk for infection related to foley catheter as evidence by lab values</p>
<p align="center">Rationale</p> <p>Patient has a shuffling gait and is unable to ambulate without help</p>	<p align="center">Rationale</p> <p>Patient comes to hospital due to increased weakness</p>	<p align="center">Rationale</p> <p>Patient's lab values include MPV: 6.1FL, Neutrophils: 72%, Lymphocytes: 13%, and Monocytes: 14.5%</p>
<p align="center">Interventions</p> <p>Intervention 1: Ambulation assessed Intervention 2: Instruct Patient to use call light when getting up</p>	<p align="center">Interventions</p> <p>Intervention 1: PT/OT worked with the patient Intervention 2: ROM Performed</p>	<p align="center">Interventions</p> <p>Intervention 1: Foley catheter care Intervention 2: Remove foley as soon as indicated</p>
<p align="center">Evaluation of Interventions</p> <p>Patient was cooperative with interventions however struggled with sundowning later in the evening. Patient was climbing out of bed and was moved to the safety zone to avoid falls.</p>	<p align="center">Evaluation of Interventions</p> <p>Patient was active in ROM and tried to do as much as physically possible.</p>	<p align="center">Evaluation of Interventions</p> <p>Patient understood the need for cleaning the foley catheter and allowed for the healthcare team to do so.</p>

Donepezil (Aricept) 5 mg nightly to treat dementia associated with Parkinson's disease

Pharmacological class: Acetylcholinesterase (Jones & Bartlett Learning, 2020).

Therapeutic class: Antidementia (Jones & Bartlett Learning, 2020).

Key nursing assessment: Monitor patients for syncope, bradycardia or heart block (Jones & Bartlett Learning, 2020). Check the patient's allergies (Jones & Bartlett Learning, 2020).

Enoxaparin (Lovenox) Subq 40 mg daily q24 hours to prevent blood clots while in the hospital

Pharmacological class: Low-molecular-weight-heparin (Jones & Bartlett Learning, 2020).

Therapeutic class: Anticoagulant (Jones & Bartlett Learning, 2020).

Key nursing assessment: Normal INR, APTT, and platelet levels should be checked prior to administration (Jones & Bartlett Learning, 2020). The patient should also be assessed for bleeding (Jones & Bartlett Learning, 2020). Check the patient's allergies (Jones & Bartlett Learning, 2020).

Insulin Lispro (Humalog) Subq 100 units/mL injection 2-12 units four times daily with meals and nightly to treat blood glucose levels greater than 180. Taking due to type two diabetes

Pharmacological class: Human insulin (Jones & Bartlett Learning, 2020).

Therapeutic class: Antidiabetic (Jones & Bartlett Learning, 2020).

Key nursing assessment: Monitor patient blood glucose level prior to administration (Jones & Bartlett Learning, 2020). Monitor patients closely for symptoms of hypoglycemia and hyperglycemia (Jones & Bartlett Learning, 2020).

Pantoprazole (Protonix) 40 mg oral daily to treat acid reflux

Pharmacological class: Proton pump inhibitor (Jones & Bartlett Learning, 2020).

Therapeutic class: Antiulcer (Jones & Bartlett Learning, 2020).

Key nursing assessment: Monitor patients PT and INR due to the use of anticoagulants (Jones & Bartlett Learning, 2020). Monitor patients' urine output because pantoprazole can cause acute interstitial nephritis (Jones & Bartlett Learning, 2020).

Sertraline (Zoloft) 25 mg oral daily to treat depression

Pharmacological class: Selective serotonin reuptake inhibitor (Jones & Bartlett Learning, 2020).

Therapeutic class: antianxiety, antidepressant, antiobsessant, antipanic, antiposttraumatic stress, antipremenstrual dysphoric (Jones & Bartlett Learning, 2020).

Key nursing assessment: Assess patients' mood regularly, monitor patient closely for suicidal tendencies (Jones & Bartlett Learning, 2020). Monitor patients for evidence of bleeding (Jones & Bartlett Learning, 2020). Monitor and report signs of serotonin syndrome, including hyperthermia, rigidity, myoclonus, and autonomic instability with fluctuating vital signs and extreme agitation that may proceed to delirium and coma (Jones & Bartlett Learning, 2020).

Simvastatin (Zocar) 40 mg oral every evening to treat hyperlipidemia

Pharmacological class: HMG-CoA reductase inhibitor

Therapeutic class: Antilipemic

Key nursing assessment: Assess any joint pain, muscle pain, tenderness, or weakness, especially if accompanied by fever, malaise, and dark-colored urine (Jones & Bartlett Learning, 2020). Monitor signs of hypersensitivity reactions, including pulmonary symptoms (Jones & Bartlett Learning, 2020). Assess dizziness that might affect gait, balance, and other functional activities (Jones & Bartlett Learning, 2020). Monitor serum lipoprotein level as ordered. Monitor patients for elevated CPK levels (Jones & Bartlett Learning, 2020).

References (3) (APA):

Hinkle, J.L., & Cheever, K. H. (2022). *Brunner & suddarth's textbook of medical-surgical Nursing* (15th ed.). Wolters Kluwer Health Lippincott Williams & Wilkins

Holman, H.C., Williams, D., Sommer, S., Johnson, J., Ball, B.S., Morris, C., Leehy, P., & Hertel, R. (2019). *Content mastery series review module: Fundamentals for nursing* (10th ed.). Assessment Technologies Institute.

Jones & Bartlett Learning. (2020). *2020 Nurse's Drug Handbook*. Burlington, MA