N321 Concept Map

Student Name:

Date of Admission: 9/9/2023
Admission Diagnosis/Chief Complaint: Closed displaced trochanteric fracture of right femur.
Age: 83 years old
Gender: Female
Race/Ethnicity: Caucasian
Allergies: Ciprofloxacin, estrogens, prednisone, tetanus, toxoid, and animal dander.
Code Status: Full
Height in cm: 157.5 cm
Weight in kg: 56.7 kg
Psychosocial Developmental Stage: Integrity vs Despair
Cognitive Developmental Stage: Formal operation
Braden Score:
Morse Fall Score:
Infection Control Precautions: N/A

Medications

Aspirin 325mg
- **Pharmacological: Salicylate (Jones and Bartlett, 2023).**
- **Therapeutic: NSAID (Jones and Bartlett, 2023).**
- **The client was taking aspirin to relieve mild pain (Jones and Bartlett, 2023).**
- **Don't crush timed-release or controlled-release aspirin tablets unless directed (Jones and Bartlett, 2023).**

Atorvastatin 10mg
- **Pharmacological: HMG-CoA reductase inhibitor (Jones and Bartlett, 2023).**
- **Therapeutic: Antihyperlipidemic (Jones and Bartlett, 2023).**
- **The client is taking atorvastatin to reduce the risk of acute cardiovascular events such as MI.**
- **Monitor diabetic patient's blood glucose levels because atorvastatin therapy can affect blood glucose control (Jones and Bartlett, 2023).**

Cefazolin sodium 2,000mg
- **Pharmacological: First-generation cephalosporin (Jones and Bartlett, 2023).**
- **Therapeutic: Antibiotic (Jones and Bartlett, 2023).**
- **The client is taking cefazolin sodium to provide surgical prophylaxis (Jones and Bartlett, 2023).**

Enoxaparin sodium 40mg
- **Pharmacological: low-molecular-weight heparin**
- **Therapeutic: Anticoagulant**
- **The client is taking enoxaparin to prevent deep vein thrombosis (DVT) after hip surgery.**
- **Keep protamine sulfate nearby in case of accidental overdose.**

Insulin lispro 100 units/mL
- **Pharmacological: inhibit lipolysis and proteolysis (Jones and Bartlett, 2023).**
- **Therapeutic: antidiabetics (Jones and Bartlett, 2023).**
- **The client is taking Insulin lispro for her T1DM.**
- **Check glucose levels.**

Lab Values/Diagnostics

POCT: 140-180 mg/dL (MedlinePlus, 2023).
Abnormal: 313 mg/dL
The clients have diabetes and is the reason for her lab value to be high.

CMP:
CO2, 23-29 mmol/L (MedlinePlus, 2023).
Abnormal: 21 mmol/L

Glucose: 100-125 mg/dL (MedlinePlus, 2023).
Abnormal: 170 mg/dL
The client has diabetes and is the reason for her lab value to be high.

Calcium: 9-10.5 mg/dL (MedlinePlus, 2023).
Abnormal: 8.6 mg/dL
The client has hyperglycemia that increase excess urine output and lower calcium level.

Hemoglobin: 12-16 g/dL (MedlinePlus, 2023).
Abnormal: 9.9 g/dL
The patient isn't taking in enough iron.

RBC: 4.2-5.4 (MedlinePlus, 2023).
Abnormal: 3.29
The patient does not contain enough nutrients to meet her body's needs.

Hematocrit: 36%-47% (MedlinePlus, 2023).
Abnormal: 29.4%

Neutrophils: 40%-60% (MedlinePlus, 2023).
Abnormal: 73.8%
The patient is fighting an infection by bacteria or viruses.

Lymphocytes: 20%-40% (MedlinePlus, 2023).
Abnormal: 16.2%
The patient has a viral infection.

Diagnostic:
X-ray: Above-described postoperative changes noted sp tfna. Right Hip.
CT Head or Brain wo contrast
Impression: moderate cerebral atrophy noted, microvascular ischemic changes noted in periventricular white matter. No skull fractures. Right maxillary sinusitis.

Admission History

Patient was brought in by EMS due to unwitnessed fall earlier on 9/9/23. Patient reported no head injury or LOC and denies SOB, nausea, vomiting, or diarrhea. Patient is being seen a closed displaced trochanteric fracture of right femur due to fall. Patient temperature was slightly evaluated. Patients provide input regarding further medical management and treatment.

Medical History

Previous Medical History: Dementia, Diabetes Type 1, HPV, Hyperlipidemia, Hypertension, and Media Mellitus.

Prior Hospitalizations: Fall 4/12/23 and 8/19/2023, Hyperosmolar hyperglycemic 9/8/2023, and UTI 6/29/2023.

Previous Surgical History: Cystoscopy, endoscopy, colon H x LEEP procedure, tonsillectomy, and adenoidectomy.

Social History: Married, never smoke, no alcohol or drug use, not currently sexually active.

Pathophysiology

Disease process: Diabetes mellitus (DM), a disorder of carbohydrates metabolism, is characterized by high levels of blood glucose resulting from the body's inability to produce or utilize insulin. T1DM and T2DM are the most typical types of diabetes. Disorders that are polygenic, or caused by mutations in several genes, exist. Both types of diabetes are affected by environmental variables as well. Diet and hormones are two typical environmental influences. Accelerators of T1DM and T2DM include obesity, sedentary lifestyles, and insulin resistance. The main cause of T1DM is autoimmune processes. T-cell-mediated autoimmune destruction of the pancreatic beta cells that secrete insulin causes insufficient insulin in people with T1DM. Autoantibodies against islet cells, insulin, and the enzymes responsible for producing insulin are present in the blood of the patient. There is no insulin in those with T1DM. The client was diagnosed as having T1DM. The patient has chronic insulin-dependent diabetes, which is a disease. Little to no insulin is produced by her pancreas. The hormone insulin is used by the body to allow glucose to enter cells where it can be converted to energy. The cells that make up muscles and other tissues mostly get their energy from glucose. After being taken into the bloodstream, sugar uses insulin to enter cells. Sugar builds up in the bloodstream in type 1 diabetes because there is no insulin to transport glucose into the cells (Capriotti, 2020).

S/S of disease: Signs and symptoms of T1DM include the classic triad (three P's): polydipsia (constant thirst), polyuria (excessive urination), and polyphagia (increased appetite). The individual may also complain of visual disturbances. Inability to concentrate, fatigue, and weakness. The typical trinity of polydipsia, polyuria, and polyphagia is present in the patient. along with weakness and exhaustion cells (Capriotti, 2020).

Method of Diagnosis: There are three ways to be diagnosis. First is A1C test for glycated hemoglobin is used to diagnose T1DM. An average blood sugar level for the previous two to three months is shown by this blood test. A1C levels of 6.5% or greater on two different tests indicate diabetes in the patient. Nest is a blood sample will be drawn at random to perform a random blood sugar test, which may then be verified by further testing. Last is a random blood sugar level of 200 mg/dL or higher suggests diabetes regardless of when you last had food. A blood sample will be taken for a fasting blood sugar test after you go without food for the previous 24 hours. A healthy fasting blood sugar level is under 100 mg/dL. Prediabetes is defined as fasting blood sugar levels of 100 to 125 mg/dL. You have diabetes if it is 126 mg/dL or greater on two different tests. It was unknow in the patient chart how she was diagnosed with T1DM cells (Capriotti, 2020).

Treatment of disease: Managing diabetes requires taking insulin, such as short-acting, rapid-acting, intermediate-acting, and long-acting insulin. Counting protein, fat, and carbohydrate intake and regularly checking blood sugar. The patient is taking enoxaparin (Lovenox) injection for her treatment. long acting cells (Capriotti, 2020).

Active Orders

CMP - New collection for physician

CBC with diff. – New collection for physician

OT evaluate & treat – Post Op Hip

Physical therapy – Gait training

Pulse – Continue monitor.

Admission weight – Nurse's discretion

Change dressing – prevent infection and proper healing.

Elevate head of bed – Patient's comfort

Blood sugar 70mg/dL or less – 70 mg/dL or less notify physician.

Insert & maintain – Maintain patients peripheral IV.

Notify physician – Pulse is less than 50 or great than 120, Resp is less than 10 or greater than 30, temperature is greater than 101.5 F, urine output is less than 240 mL in 8 hours, systolic BP less than 85 or great than 180, diastolic BP is less than 50 or greater than 105, and new onset or worsening pain.

Strict bedrest – post hip surgery

Perform blood glucose – notify physician if greater than 400 or less than 70.

Place sequential compression device – prevent formation of blood clots.

Strict I/O – monitor blood sugar levels and urine output

Physical Exam/Assessment

General: The patient was alert and oriented x2 to person, place, and time. Well-groomed, with little distress.

Integument: The patient skin color was pink. The skin was warm and dry upon palpation—no rashes, lesions, or bruising. Skin turgor normal mobility. Capillary refill less than 3 seconds fingers.

HEENT: Head and neck are symmetrical; trachea is midline without deviation. Bilateral carotid pulses are palpable and 2+. Bilateral sclera white, bilateral lids ar moist and pink without lesions or discharge. PERRLAL bilaterally. EOMs intact bilaterally.

Cardiovascular: Clear S1 and S2 without murmurs gallops or rubs. PMI not palpable at 5th intercostal space at MCL. Normal rate and rhythm.

Respiratory: Normal rate and pattern of respirations, respirations symmetrical and non-labored, lung sounds clear throughout anterior bilaterally, no wheezes, crackles, or rhonchi noted.

Genitourinary: The patient has a catheter in.

Gastrointestinal: The abdomen is soft, nontender, nondistended, or masses upon palpation of all four quadrants. Bowel sounds are normoactive in all four quadrants. No CVA tenderness.

Musculoskeletal: The patient doesn't have full range of motion (ROM) in extremities. Hand grips demonstrate normal and equal strength. Pedal push and pulls demonstrate abnormal and nonequal strength.

Neurological: Patient alert and oriented to person, place, and time x2. PERRLA. Unable to perform Rhombergs test.

Most recent VS (include date/time and highlight if abnormal): N/A

Pain and pain scale used: Patient verbalized pain using on a scale on 1-10. The patient stated pain being a 7.

Nursing Diagnosis 1 Risk for unstable blood glucose level related to inadequate blood glucose monitor as evidenced by hyperglycemia (NurseStudy, 2023).	Nursing Diagnosis 2 Risk for chronic confusion related to cognitive impairment secondary to dementia as evidenced by poor attention span (NurseStudy, 2023).	Nursing Diagnosis 3 Self-care deficit related to musculoskeletal impairment and physical limitation as evidenced by hip surgery (NurseStudy, 2023).
Rationale The diagnosis was chosen because the patient has a glucose test of 170 mg/dL. Normal values are 100-125.	Rationale The diagnosis was chosen because the patient was unaware of where she was, the day, and the time.	Rationale The diagnosis was chosen because the patient is recovering from hip surgery and has poor mobility.
Interventions Intervention 1: Monitor blood glucose levels. Intervention 2: Administer diabetic medication as prescribed.	Interventions Intervention 1: Assess the level of impairment that the patient is experiencing. Intervention 2: Assess the patient's functioning including the patient's social situation, physical condition, and psychological functioning.	Interventions Intervention 1: Refer the patient to occupational and physical therapy. Intervention 2: Encourage the patient to use assistive devices and grooming aids as needed.
Evaluation of Interventions The patient will maintain normal glucose levels and be aware of signs of hyperglycemia or hypoglycemia.	Evaluation of Interventions The patient will be able to remain content and she will from harm. As able to function at her maximal cognitive level.	Evaluation of Interventions The patient will slowly regain autonomy when performing self-care activities.

References (3) (APA):

Capriotti, T. M. (2020). *Davis advantage for pathophysiology: Introductory concepts and clinical perspectives* (2nd ed.). F. A. Davis Company.

Jones & Bartlett Learning. (2020). *2021 nurse's drug handbook* (20th ed.). Jones & Bartlett Learning.

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