Medications

Warfarin 5 mg = 1 tabs, PO, Daily Pharmacological class: Coumarin derivate. Therapeutic class: Anticoagulant. Taking medication to reduce risk of another CVA. Key nursing assessment, monitor INR daily and assess for therapeutic effects.

Budesonide (budesonide 0.5 mg/2mL inhalation suspension) Pharmacological class: Corticosteroid. Therapeutic class: Antiasthmatic, anti-inflammatory. The client is taking this because of her COPD. Key nursing assessment is monitor patents with hypertension as glucocorticosteroid therapy may increase adverse effects.

Formoterol 20 mcg = 2 mL, NEB, BID pharmacologic class: selective beta2 adrenergic agonist. Therapeutic class: Bronchodilator. Client is taking this medication also for her COPD. Key nursing assessment is to be aware that formoterol therapy should not be initiated in patients with acutely deteriorating COPD, which may be a life-threatening condition, nor should it be administered for the relief of acute symptoms.

Atorvastatin 80 mg = 1 tabs, PO, BID pharmacologic class: HMG-CoA reductase inhibitor. Therapeutic class: Antihyperlipidemic. Client takes this medication because of her high cholesterol. Key nursing assessment: Monitor liver function tests.

levETIRAcetam (Keppra) 500 mg = 2 tab, PO, BID Pharmacological class: Pyrrolidine derivative Therapeutic class: Anticonvulsant. The client is taking this to prevent seizures. Key nursing assessment is to monitor patient for bleeding, fever, recurrent infections, or significant weakness.

hydroxychloroquine 200 gm = 1 tabs, PO, BID Pharmacologic class: Aminoquinoline. Therapeutic class: Antimalarial, antirheumatic, lupus erythematosus suppressant. The client is taking this because of her diagnosis of lupus. Key nursing assessment is to obtain periodic blood cell counts, as ordered, during prolonged therapy to detect adverse hematologic effects. Expect to stop drug if severe adverse effects occur.

hydrocodone-acetaminophen (Norco 7.5 mg-325 mg oral tablet) 1 tabs, oral, every 4 hr, PRN: pain, moderate. Pharmacologic class: Opioid. Therapeutic class: Opioid analgesic Controlled substance schedule: II. Client is taking this for pain control after her fall. Key nursing assessments include using extreme caution administering this to patients with COPD as it can cause respiratory depression.

(Jones & Bartlett et al 2023).

Lab Values/Diagnostics

BUN ^44 Previous ^41 Normal range is 6-20. Hers is elevated due to her acute kidney injury from the fall

Creatinine Lvl ^ 2.40 Previous ^ 3.37 Normal 0.5-1, hers is elevated due to acute kidney injury

PT new order; previous ^ 20.0 Normal 11.5-15. Hers is elevated because of her medication and kidney injury combined

INR new ordered; previous ^ 1.64 Normal 0.81-1.20. Hers is elevated due to medication and kidney injury

WBC 4.0

CK new ordered; previous 123

Sodium 139 prev. 140

Potassium 4.3 prev 3.5

Chloride Lvl ^109 normal 98-107. Slightly elevated due to kidney injuryCo2 25 PREV 25

Calcium low 8.1 prev 8.4

Mag new ordered; prev low 1.4

Demographic Data

Date of Admission: 03/23/24
Admission Diagnosis/Chief Complaint: CVA
Age: 66
Gender: Female
Race/Ethnicity: African American
Allergies: Flexeril; severe allergy
Code Status: Full Code
Height in cm: 157 cm
Weight in kg: 49.4 kg
Psychosocial Developmental Stage: appropriate for age
Cognitive Developmental Stage: appropriate for age
Braden Score: None available in chart.
Morse Fall Score: 100
Infection Control Precautions: None

Admission History

Onset of clients CVA began on 3/15/24, location is intracranial duration of the incident is still being looked into. Characteristic of the clients symptoms is right sided facial drooping. Associated manifestations was that it caused her to loose balance and fall down 3 steps. Relieving factors for her fall include hydrocodone-acetaminophen, there are no relieving factors for her CVA. Treatment includes bed rest and hyydrocodone-acetaminophen.

1; acute kidney injury superimposed on chronic kidney disease 2 fall from stairs 3 current use of long term anticoagulation 4 SLE (systemic lupus erythematosus); 5 hypertension COPD mixed type; DJD (degenerative joint disease), Lumbar; fall; neuropathy; seizure disorder

Medical History

Previous Medical History: History of multiple strokes, Anemia, Asthma, CKD 3, COPD, CVA, DVT, HTN, Neuropathy, Smoker, Lupus, MS, long term anticoagulant

Prior Hospitalizations: Stroke, Lupus, MS, CVA, seizures

Previous Surgical History: **Right Hip 7/24/19;** Colonoscopy 2/2/22; Cataract no date; Esophagogastroduodenoscopy biopsy 2/2/22;

Social History: Tabacco use 4 or less cigarettes (less than ¼ pack)/day in last 30 days; alcohol past user; substance use past user; regular diet; hom environment lives alone; no alcohol abuse in household; employment/school disability.

Pathophysiology

Disease process: CVA

"A stroke is a specific type of brain injury caused by ischemia of brain tissue or hemorrhage of a cerebral blood vessel; it is a clinical syndrome whereby a disruption in cerebral circulation triggers abrupt neurological deficits that are permanent. An ischemic stroke is caused by a thrombus or embolus that lodges in a cerebral artery and blocks blood flow to the brain tissue. Ischemia of the brain tissue leads to cerebral infarction, which is the death of brain cells. A hemorrhagic stroke is caused by rupture and hemorrhage of a cerebral artery, leading to compression and toxicity of brain cells and loss of cerebral blood flow. Approximately 85% of strokes are due to ischemia, whereas 15% are hemorrhagic strokes. Another kind of ischemic injury of the brain is called a transient ischemic attack (TIA). Many persons call this a "mini stroke" which is an inaccurate label. A TIA is a disruption of cerebral circulation with neurological deficits that are reversible and last for less than 24 hours. In a TIA, the body naturally dissolves the clot that caused the ischemia, circulation returns, and there is no permanent neurological injury. However, TIA is often a warning sign of future stroke (Capriotti, 2020)."

S/S of disease:

The American Heart Association and American Stroke Association suggest using the acronym FAST to recognize signs of a stroke:
Facial droop
Arm weakness
Speech difficulty
Time to call 911 and check the time when the symptoms began.

Method of Diagnosis:

The ways you can diagnose a CVA are through computerized tomography (CT), Magnetic Resonance Angiography (MRA), Transcranial doppler. My client was diagnosed by using a CT scan.

Treatment of disease:

Rapid diagnosis of the type of stroke that is occurring is extremely important for correct treatment initiation. A CT scan should be performed as soon as the patient enters the health-care facility. Treatment begins with stabilization to prevent further brain injury. It is important to maintain a patent airway and to stabilize blood pressure and cardiac rhythm. Regulation of body temperature and blood glucose levels is also important (Capriotti, 2020).

Active Orders

Place in observation

Request for admit

CHG bath second to urinary catheter

Strict I/O monitoring

Up with assistance

Heart healthy nutrition

Laboratory: CBC CMP Iron panel; creatinine; PT and INR CBC w/ Diff

Fall risk percautions

Physical Exam/Assessment

General: Patient is A/Ox4. Oriented to self, location, and time. She is not in any type of distress and her overall appearance is healthy. Good personal hygiene, weight, and clean surroundings.

Integument: Patients skin tone is normal for race, skin is warm and dry to the touch. Skin turgor is good, instant retraction back. ==There is hematoma present on right hip as well as scattered bruises on arms and legs from her fall down the stairs.== No rashes, lesions, or open wounds are present. No drains are present.

HEENT: Head and neck appear symmetrical, ears are normal with no drainage, sores, or wounds. Eyes are clear. PERRLA is present. Nose is symmetrical. ==Some teeth are missing from dental procedures.==

Cardiovascular: Regular heart sounds, rate, and rhythm. No murmurs auscultated. Peripheral pulses strong/regular. Capillary refill less than 3 seconds. No neck vein distension, no edema present.

Respiratory: No use of accessory muscles. Breath sounds are clear and unlabored. No adventitious sounds detected.

Genitourinary: Urine color yellow, character clear. Upon removal of catheter there was 250 mL present. No pain with urination, not on dialysis. Genitals are functioning as expected. No open sores, rashes, or wounds. No longer a catheter present.

Gastrointestinal: Diet regular, Bowel sounds are normoactive in all 4 quadrants. Last BM was 3/22, auscultation of the four quadrants was 0/10 for pain. No distention or irregular findings. No incisions, scars, drains, wounds, ostomy, nasogastric, or feeding/PEG tubes present.

Musculoskeletal: ==Neurovascular signs show slight facial droop and slurred speech on the right side as a result of her CVA==. Full range of motion present in all areas. No assistive devices are needed for ambulation. ==Strength is appropriate on left side and only slight weakness on right side==. No need for ADL assistance.

Neurological: PERRLA is present, ==strength slightly weaker on right side==, strength as to be expected on left side. A/Ox4. Mental status is average for age, ==speech is slurred.== Sensory: responds to different stimuli, and is oriented to what is going on.

Most recent VS (include date/time and highlight if abnormal): 3/24/24 @ 10:23

HR 74; Temp 35.3; BP 126/80; RR 18; SPO2 98% on room air

Pain and pain scale used:

Self reported 8/10 pain on number rating scale

Nursing Diagnosis 1	Nursing Diagnosis 2	Nursing Diagnosis 3
Anxiety related to situational crisis, change in physical or emotional condition as evidence by her need to go to a skilled rehabilitation facility.	Ineffective tissue perfusion related to interruption of blood flow to the brain as evidence by slurred speech and facial drooping.	Impaired verbal communication related to prolonged cerebral occlusion as evidence by slurred speech.
Rationale	**Rationale**	**Rationale**
She needs extended rehabilitation time to regain more strength.	Patient needs to be aware of stroke signs and seek early intervention.	Patient needs to attend therapy before the effects are irreversible.
Interventions	**Interventions**	**Interventions**
Intervention 1: Integrate the family in conversations about facilities. **Intervention 2:** Bring her material to look at the facilities and research them.	**Intervention 1:** Patient will recognize symptoms of a stroke and seek immediate medical attention. **Intervention 2:** Patient will display improvement in stroke deficits such as slurred speech, weakness, and swallowing ability by discharge.	**Intervention 1:** Patient will participate in therapy in order to improve communication. **Intervention 2:** Patient will utilize resources and devices that aid in communication.
Evaluation of Interventions	**Evaluation of Interventions**	**Evaluation of Interventions**
Client insists that she can care for herself and does not need to go to a rehabilitation facility.	Client was able to repeat to me what the symptoms of a stroke are and that she will call 911 immediately. She will also go to therapy to improve her deficits.	Patient agrees to attend therapy and knows that if she doesn't this could be permanent. She also will carry a piece of paper and pen in her purse to communicate with anyone who can't understand her.

(Phelps, L.L., et al 2023).

References (3) (APA):

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

Jones & Bartlett Learning. (2023). In 2023 Nurse's Drug Handbook (2023rd. ed.,)

Phelps, L.L. (2023). *Nursing diagnosis reference manual* (Twelfth). Wolters Kluwer.