

Medications

- Clopidogrel 75 mg PO daily
 - Pharmacological class: P2Y12 platelet inhibitor
 - Therapeutic class: Platelet aggregation inhibitor
 - Indication: Reduce platelet aggregation for diagnosed ischemic stroke
 - Check blood pressure, pulse, and mental status
- Lisinopril 10 mg PO BID
 - Pharmacological class: ACE inhibitor
 - Therapeutic class: Antihypertensive
 - Indication: Hx of HTN and last recorded BP of 163/76
 - Assess BMP for BUN, creatinine, sodium, and potassium. Assess and monitor BP.
- Metoprolol 50 mg PO BID
 - Pharmacological class: Beta-adrenergic blocker
 - Therapeutic class: Antihypertensive
 - Indication: Hypertension (163/76 BP)
 - Assess renal function. Assess pulse and bp (should be >60 bpm and >90 systolic BP)
- Atorvastatin 20 mg PO daily
 - Pharmacological class: HMG-CoA reductase inhibitor
 - Therapeutic class: Antihyperlipidemic
 - Indication: Hx of hypercholesterolemia
 - Assess liver function tests, cholesterol, and triglycerides
- Metformin 500 mg PO daily
 - Pharmacological class: Biguanide
 - Therapeutic class: Antidiabetic
 - Indication: Hx of T2DM
 - Assess CBC, renal function tests, and blood glucose
- Ondansetron 4 mg q8h PRN
 - Pharmacological class: Selective serotonin receptor antagonist
 - Therapeutic class: Antiemetic
 - Indication: Nausea
 - Assess severity of nausea or vomiting. Assess for signs of dehydration like poor skin turgor or dry mucous membranes
- Acetaminophen 650 mg PO q8h PRN
 - Pharmacological class: Nonsalicylate
 - Therapeutic class: Antipyretic, nonopioid analgesic
 - Indication: Mild generalized head pain
 - Assess pain level and location
- Hydrocodone/acetaminophen 7.5/325 PO q8h PRN
 - Pharmacological class: Opioid
 - Therapeutic class: Opioid analgesic
 - Indication: Moderate to severe pain
 - Assess pain level and location. Check vital signs to make sure respirations are 12+/min
- Morphine 0.5 mg IV q2h PRN
 - Pharmacological class: Opioid
 - Therapeutic class: Opioid analgesic
 - Indication: Severe pain
 - Assess pain level and location. Check vital signs and make sure respirations are 12+/min
- Docusate
 - Pharmacological class: Surfactant
 - Therapeutic class: Laxative, stool softener
 - Indication: Constipation
 - Assess pulse and signs of dehydration

Demographic Data

Date of Admission: 3/17/20
Admission Diagnosis/Chief Complaint: Right-sided weakness and facial drooping
Age: 60 years old
Gender: Male
Race/Ethnicity: Caucasian
Allergies: Sulfa drugs
Code Status: FULL
Height in cm: 177.8
Weight in kg: 100
Psychosocial Developmental Stage: Generativity vs stagnation
Cognitive Developmental Stage: Formal operational
Braden Score: 20
Morse Fall Score: 40
Infection Control Precautions: Standard

Pathophysiology

Disease process: An ischemic stroke is the result of a blood clot traveling to cause an obstruction of blood flow to the brain. As a result, the lack of oxygen from blocked cerebral arteries interferes with normal motor and sensory function. An air or fat embolism is also capable of restricting blood flow (Hui et al., 2022).

S/S of disease: Signs and symptoms include slurred speech, weakness in one side, vertigo, severe headache, visual disturbances, and facial drooping (Chugh, 2019).

Method of Diagnosis: A CT of the head or MRI of the brain is generally used to diagnose an ischemic stroke. An ECG and coagulation tests are also performed, which has been done for this patient (Hui et al., 2022).

Treatment of disease: Alteplase is a thrombolytic drug that is used to break down a clot to restore blood flow. Mechanical thrombectomy is used to remove significant occlusions. Antihypertensives are used to manage high blood pressure. Antiplatelet medication like aspirin and antithrombotic drugs like warfarin are administered to prevent the reoccurrence of a stroke (Hui et al., 2022).

Lab Values/Diagnostics

Lab/Diagnostic value	Normal Range	Current value
Hgb	14-18 g/dL	15.3
Hct	42-52%	47
Platelets	150-300	143
WBC	5-10	6.3
Na	136-145	139
K	3.5-5	3.6
Cl	98-106	106
Glucose	82-115	147
BUN	10-20	15
Creatinine	0.6-1.2 mg/dL	0.9
A1c	< 7%	9.4
PT	11-12.5	11.3
PTT	60-70	33.6
INR	0.8-1.1	1.03

The patient has a slightly reduced platelet count. Their glucose level is high, likely due to their poorly controlled diabetes mellitus. The HbA1c is used to determine the control of blood glucose levels over the past 100-120 day period (Pagana, 2018). The patient's value is elevated, which is why they have been educated on following a low-carbohydrate diet. A chest x-ray and CT of the head without contrast were done and had negative results. An EKG was also done and shows no abnormalities and no ST segment elevation.

Admission History

O.B. is a 60-year-old male who was admitted to the emergency department. The patient was transported by EMS after presenting with signs of ischemic stroke such as right-sided weakness and facial drooping. No relieving or aggravating factors were reported. A CT scan was performed and 0.9 mg tPA was administered along with an IV drip at a rate of 81 mg/hr. A swallow test confirmed that the patient could take pills. The patient is to be later assessed in the neurological unit and will follow a low carbohydrate diet.

Medical History

Previous Medical History: Hypertension, hypercholesterolemia, T2DM (uncontrolled), obesity (31.6 BMI)

Prior Hospitalizations: N/A

Previous Surgical History: Colonoscopy (2018)

Social History: Smokes 1 pack a day and has for 40 years, no history of drug or alcohol use

Active Orders

- **Bedside swallow test:** This was ordered to assess the patient's ability to swallow because of the possibility of impaired motor function that could lead to aspiration.
- **Blood glucose monitoring AC/HS.** Call provider for BG >200: The patient has type 2 diabetes mellitus, so their blood sugar needs to be assessed before meals and at bedtime to prevent potential complications.
- **IV access:** This is needed to administer tPA and other medications like morphine if necessary.
- **Low carbohydrate diet:** The patient has poorly controlled diabetes as evidenced by their HbA1c being greater than 9%.
- **Monitor intake and output:** This is recorded and assessed to evaluate fluid balance and renal function.

Physical Exam/Assessment

General: Patient is alert and oriented x4. No acute distress.

Integument: Skin is pink, warm, and dry upon palpation. No wounds, bruises, or rashes present.

HEENT: Head and neck are symmetrical. Sclera and conjunctiva are normal bilaterally. PERRLA. EOMs intact. External ears are normal. Mucosa of the mouth and nose are pink and moist. No facial droop noted.

Cardiovascular: Normal S1 and S2 sounds. Normal heart rate and rhythm. No neck vein distention. Radial pulses 2+.

Respiratory: Airway is patent, and breathing is clear and equal bilaterally.

Genitourinary: 800 mL urinary output in 4 hours.

Gastrointestinal: Abdomen is soft and nontender. 1 bowel movement. Bowel sounds are normal and present throughout. No distention or masses present.

Musculoskeletal: No reports of numbness or tingling. **Mild weakness noted on right side.**

Neurological: Alert and oriented. Speech is normal. No reports of paresthesia.

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

Time	Pulse	Blood pressure	Respirations	Temperature	O2 Saturation
0700	76	163/76	16	37	98%
1100	69	124/64	18	36.9	97%

Pain and pain scale used: 0700 – 4/10 generalized head pain on numeric scale, Tylenol administered

1100 – 1/10 generalized head pain on numeric scale, no intervention at this time

Nursing Diagnosis 1 Risk for ineffective cerebral tissue perfusion related to ischemic stroke as evidenced by acute weakness, facial drooping, and head pain	Nursing Diagnosis 2 Risk for injury related to ischemic stroke as evidenced by mild right-sided weakness	Nursing Diagnosis 3 Acute pain related to ischemic stroke as evidenced by generalized head pain that is a 4/10 on numeric pain scale
Rationale This nursing diagnosis was chosen because the patient had an ischemic stroke that would restrict blood flow to the brain. Therefore, it is important to ensure their safety while they receive the necessary treatment and diagnostic tests.	Rationale This nursing diagnosis was chosen because the patient has unequal muscle strength and weakness that resulted from their ischemic stroke, in which they were referred to physical therapy. The nurse should prevent the risk of injury that can occur from this right-sided weakness.	Rationale The patient has reported head pain and is prescribed analgesics. It is always a priority of the nurse to treat a patient's pain to reduce stress.
Interventions Intervention 1: Monitor coagulation studies, blood pressure for hypertension, and oxygen saturation to maintain adequate cerebral perfusion. Intervention 2: Educate the patient on signs of decreased cerebral perfusion, so that they can report it and get proper treatment. Assess mental status.	Interventions Intervention 1: Assess motor, mental, or sensory deficits to identify specific safety needs. Intervention 2: Assist the patient to identify situations and safety hazards that could cause injury to increase their awareness of potential dangers.	Interventions Intervention 1: Use a pain scale to assess pain so that interventions for relief could be evaluated after being implemented into the care of the patient. Intervention 2: Assess pain level and administer prescribed pain medication when indicated by the patient.
Evaluation of Interventions The patient will understand signs and symptoms of poor tissue perfusion. The patient will remain stable and exhibit lab values that are within normal range. The patient will also know about their modifiable risk factors and how to reduce their effect.	Evaluation of Interventions The patient will be safe from injury. They will understand potential hazards that could cause harm to reduce the risk of injury.	Evaluation of Interventions The patient will report a lower score on the pain scale to show effectiveness of interventions.

References (3) (APA):

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