N441 Care Plan

Lakeview College of Nursing

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Demographics (3 points)

Date of Admission 03/04/2024	**Client Initials** MG	**Age** 80 years old	**Gender** Female
Race/Ethnicity White	**Occupation** Casey's in Hoopeston (part-time)	**Marital Status** Widower	**Allergies** Hydrocortisone – blister and rash – no date listed
Code Status Full Code	**Height** 5'1" (154.9 cm)	**Weight** 115 lbs (52.2 kg)	

Medical History (5 Points)

Past Medical History: The patient has a past medical history of hypertension, COPD, and glaucoma. There were no dates listed for these conditions.

Past Surgical History: The patient has a past surgical history consisting of a breast biopsy and cataract removal with unknown dates, three colonoscopies in 2011, 7/26/2021, and 11/4/2022, and an IR manual Thrombectomy on 3/04/2024.

Family History: The patient's deceased father (date of death unknown) had a history of mumps, and the patient has a family history of colon and breast cancer on her maternal side.

Social History (tobacco/alcohol/drugs including frequency, quantity, and duration of use): The patient was a former cigarette smoker, but no pack per day was listed, when she stopped smoking, or how long she smoked for was listed in the chart. The patient could not be asked these questions because of sedation. The patient's chart states the patient denied the use of vaping, alcohol, and drug use.

Assistive Devices: The patient uses dentures and glasses as assistive devices during her normal day.

Living Situation: The patient lives alone on the West side of Hoopeston Il. No other information about the patient's living situation was noted in the chart and the patient could not be asked due to being sedation.

Education Level: The education level of this patient is unknown, as it was not listed in the chart, and the patient could not be asked due to being sedated.

Admission Assessment

Chief Complaint (2 points): "Left-sided facial drooping and left-sided weakness"

History of Present Illness – OLD CARTS (10 points):

On 3/4/24 at approximately 1525, the patient was at McDonald's in Hoopeston drinking coffee with her friends when she started experiencing left-sided weakness, left-sided facial drooping, and aphagia. At the time, there happened to be four nurses ordering food at McDonald's, so they all proceeded to call 911, assess the patient, and concluded that this patient was probably having a stroke. EMS arrived and took her blood pressure, which was 158/113, so she was rushed to Carle in Urbana for hypertension and symptoms of possible stroke.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Right-sided MCA stroke

Secondary Diagnosis (if applicable): Subdural hematoma

Pathophysiology of the Disease, APA format (20 points):

What a stroke is:

According to Swearingen and Wright (2019, p. 339), "Strokes are the third most common cause of death and the most common cause of disability." A stroke is a sudden interruption in the

supply of oxygen to the brain. This interruption in oxygen flow can result in brain tissue death or the patient to die if not treated promptly (less than 6 hours).

Signs and symptoms of a stroke:

There are two different types of strokes, left- and right-sided. Patients who experienced a left-sided stroke will see the effects of the stroke on the right side of their body, whereas patients who have had a right-sided stroke will see the effects on the left side of their body. Some signs and symptoms of a right-sided stroke that this patient experienced included left-sided facial drooping, left-sided weakness, and aphasia. Other potential symptoms can include agitation, confusion, memory loss, or drowsiness. More symptoms a patient can also experience include bowel or urinary incontinence, numbness, headache, stiffness and rigidity of the neck, vomiting, fainting, fever, and difficulty chewing or swallowing (Swearingen & Wright, 2019). Possible additional signs of a stroke can include hyperactive deep tendon reflexes, decreased superficial reflexes, and positive Babinski and Kernig signs.

Risk factors of a stroke:

Risk factors for a stroke include high blood pressure, excessive buildup of cholesterol plaque in the walls of the arteries, high levels of cholesterol, diabetes mellitus, gout, obesity, anticoagulant therapy, neck vein trauma, heart surgery, use of oral birth controls, smoke, cocaine or drug use, family or personal history of strokes, weakening arterial walls, and advanced age (Capriotti, 2020). This patient has hypertension, a history of smoking, and is elderly, which puts her at risk of a stroke. However, since this patient is not considered obese or has a history of drug use, this can help prevent another stroke from occurring.

Diagnostic testing of a stroke:

Diagnostic testing for a stroke includes computed technology (CT) to look for potential hematomas, MRI to look for potential hematomas or site of infection, lab tests (serum electrolytes, complete blood count, clotting times, lipid panel, and c-reactive protein) to assess for potential contraindication to the use of medication to destroy blood clots, electrocardiogram (ECG) to look for abnormal heart rhythm called atrial fibrillation, and a cerebral and carotid or digital subtraction angiography, which is a form of x-ray that is used to assess blood vessels (Capriotti, 2020). Upon admission, the hospital performed an ABG, CT brain perfusion with contrast, computed tomographic angiography of the head and neck, an ECG 12-lead in triage, an X-ray of the patient's chest, kidney, bladder, and ureters, and an MRI of the brain without contrast was performed while the patient was inpatient on 03/05/24. The results of the ABG were abnormal, including the PaO2 was higher than 80 mmHg, the HCO3 was less than 20 mmol/L, and the pH was less than 7.35. The PaCO2 was within normal range, though. All the patient's blood work was normal and presented within the normal ranges. No abnormalities were observed on the ECG. The CT showed a subdural hematoma was present, but the MRI results were not completed by the time clinical had ended.

Nursing interventions for a stroke:

Nursing interventions for someone with a stroke would include assessing and monitoring mental status, airway patency, and respiratory patterns, potential complications related to decreased brain perfusion including increased intracranial pressure, neurological status, vital signs including respirations and blood pressure, evaluating pupils and how they react to light (noting size shape, and equality), changes in speech, and monitoring blood glucose (Swearingen

& Wright, 2019). The nurse can also have the client elevate their bed to 30 degrees and maintain bedrest in a quiet and relaxing environment. Since the patient was on a ventilator as well, the nurse needs to give pain medication prophylactically, provide oral care daily, assess how the patient is tolerating the ventilator, assess the vent's alarm and settings every hour, assess the patient's respirations for a full minute to assess for possible respiratory alkalosis, administer sedation as needed, assess lung sounds, check the endotracheal tube cuff inflation every 4–8 hours, and suction the patient as needed and observing the color, odor, quantity and consistency of the sputum. Once this patient gets closer to being discharged, the nurse needs to make referrals to physical therapy, rehabilitation centers, home health agencies, speech and language therapists, occupational therapists, mental health therapists, and social workers.

Education for patients who suffered a stroke:

Once the patient is removed from the ventilator, the nurse needs to provide teaching to the patient that focuses on sensory information. This teaching should include warning signs and symptoms of strokes when to seek medical help, interventions for safe swallowing and aspiration prevention methods post-stroke, the importance of minimizing smoking, managing hypertension, reducing sodium intake, how to and how often to take their blood pressure, and the importance of compliance to post-stroke therapies and medication regimens.

Treatment for a stroke:

Treatment for a stroke includes medications, supportive care, surgery, and therapies. Medications for a stroke include alteplase, anticoagulants, antihypertensives, and ACE inhibitors. Supportive care can include cardiac monitoring. Surgeries can include carotid endarterectomy,

thrombectomy, or carotid angiography and stenting. Therapies for stroke patients can include speech therapy, rehabilitation, occupational therapy, and physical therapy.

Pathophysiology References (2) (APA):

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

Swearingen, P. L., & Wright, J. (2019). *All-in-one nursing care planning resource: Medical-surgical, pediatric, maternity, and psychiatric-mental health* (5th ed.). Mosby

Laboratory Data (15 points)

RBC	3.50-5.70 10^6/uL	4.06	3.77	
Hgb	12.0 – 17.0 g/dL	13.6	11.6	
Hct	38.0-51.0 %	40	34.8	
Platelets	140-400 10^3/uL	184	222	
WBC	4.00-11.00 10^3u/L	5.17	12.25	Increased WBCs can indicate inflammation or infection in a patient. White blood cells are seen in patients who have had a stroke, specifically an ischemic stroke. However, since the patient is on a ventilator, this causes concern for possible infection, including ventilator-acquired pneumonia (Pagana et al, 2021).
Neutrophils	1.60 – 7.70 10^3/uL	N/A	N/A	
Lymphocytes	1.00-4.90 10^3/uL	N/A	N/A	
Monocytes	0.0 – 1.10 10^3/uL	N/A	N/A	
Eosinophils	0.01-0.20 10^3/uL	N/A	N/A	

Bands	0.0 – 0.09 10^3/uL	N/A	N/A	

Chemistry Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal
Na-	136 – 148 mmol/L	138	146	
K+	3.5 – 4.9 mmol/L	3.8	3.6	
Cl-	98-107 Mmol/L	102	106	
CO2	22.0 – 29.0 mmol/L	24.0	19.0	
Glucose	74 – 100 mg/dL	96	121	
BUN	8-26 mg/dL	15	12	
Creatinine	0.55 – 1.02 mg/dL	0.8	0.69	
Albumin	3.5-5.2 gm/dL	3.8	N/A	
Calcium	8.9 – 10.6 mg/dL	8.8	N/A	The patient's low calcium levels are most likely related to the patient being an elderly female who has experienced menopause. Decreased calcium is common for patients of this profile (Pagana et al, 2021).
Mag	1.6-2.6 mg/dL	N/A	1.8	
Phosphate	2.5-4.5 mg/dL	N/A	N/A	
Bilirubin	0.2 – 1.2 mg/dL	0.4	N/A	

Alk Phos	40-150 U/L	58	N/A	
AST	5-34 U/L	225	N/A	
ALT	0-55 U/L	312	N/A	
Amylase	30 - 110 U/L	N/A	N/A	
Lipase	0-160 U/L	N/A	N/A	
Lactic Acid	0.5 to 2.2 Mmol/L	N/A	N/A	
Troponin	0-4 ng/L	3	N/A	
CK-MB	N/A	N/A	N/A	
Total CK	N/A	N/A	N/A	

Other Tests Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
INR	0.9 -1.1 ration	1.0	N/A	
PT	11.7-13.8 seconds	13.4	N/A	
PTT	22.4-35.9 seconds	N/A	N/A	
D-Dimer	< 0.50 ug/mL	N/A	N/A	
BNP	<300 pg/mL	N/A	N/A	
HDL	40-60 mg/dL	N/A	54	
LDL	<100 mg/dL	N/A	108	The patient's diagnosis of a stroke indicates that this could be a potential reason why her LDLs were high, as this is considered a risk factor (Pagana et al, 2021).
Cholesterol	0-200 mg/dL	N/A	179	

Triglycerides	<150 mg/dL	N/A	83	
Hgb A1c	4.0-7.0%	N/A	5.3	
TSH	0.34 -5.00 mcLU/mL	N/A	N/A	

Urinalysis Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
Color & Clarity	Yellow & Clear or cloudy	**N/A**	**N/A**	
pH	5.0 – 7.0	N/A	N/A	
Specific Gravity	1.003 – 1.035	N/A	N/A	
Glucose	Negative	N/A	N/A	
Protein	Negative	N/A	N/A	
Ketones	Negative	N/A	N/A	
WBC	0.0-20.0	N/A	N/A	
RBC	0.0-20.0	N/A	N/A	
Leukoesterase	Negative	N/A	N/A	

Arterial Blood Gas Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
pH	7.35-7.45	7.33	7.40	The patient's history of hypertension, which is associated with metabolic acidosis, can affect

				the patient's pH level making it lower than normal. Low pH levels can also be associated with tissue hypoxia, caused by the stroke (Pagana et al, 2021).
PaO2	80-100	172.3	97	Since the pH is low with metabolic acidosis, the body is trying to compensate and increase the amount of O2 present in the body, causing the levels to be high (Pagana et al, 2021).
PaCO2	35-45	39.0	35.8	
HCO3	22-26	20.0	23.1	Low levels of bicarbonate (HCO3) are associated with metabolic acidosis since the bicarbonate decreases in the blood because the body is trying to compensate to decrease the oxygen levels and increase the pH levels in the body (Pagana et al, 2021).
SaO2	92-100%	98.7	98.8	

Cultures Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Test	**Normal Range**	**Value on Admission**	**Today's Value**	**Explanation of Findings**
Urine Culture	4.5-8.0 pH	N/A	N/A	
Blood Culture	7.35-7.45 pH	N/A	N/A	
Sputum Culture	7.00 pH	N/A	N/A	
Stool Culture	6.5-7.5 pH	N/A	N/A	

Lab Correlations Reference (1) (APA):

Pagana, T. J., Pagana, T. N., & Pagana, K. D. (2021). *Mosby's Manual of diagnostic and laboratory tests* (7th ed.). Elsevier - Health Sciences Division

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

Upon admission, the hospital performed an ABG, CT brain perfusion with contrast, computed tomographic angiography of the head and neck, an ECG 12-lead in triage, an X-ray of the patient's chest, kidney, bladder, and ureters, and an MRI of the brain without contrast was performed while the patient was inpatient on 03/05/24. The results of the ABG were abnormal, including the PaO2 was higher than 80 mmHg, the HCO3 was less than 20 mmol/L, and the pH was less than 7.35. The PaCO2 was within normal range, though. All the patient's blood work was normal and presented within the normal ranges. No abnormalities were observed on the ECG. The CT showed a subdural hematoma was present, but the MRI results were not completed by the time clinical had ended.

Diagnostic Test Correlation (5 points):

Each diagnostic test is ordered and performed to help better the patient and the patient's quality of life, by examining the whole body to search for any abnormalities and health risks. The computed technology (CT) was performed to look for potential hematomas. The MRI was performed to look for potential hematomas or sites of infection. The lab tests (serum electrolytes, complete blood count, brain natriuretic peptide, clotting times, lipid panel, and c-reactive protein) wanted to assess for potential contraindications to the use of medication to destroy blood clots. An electrocardiogram (ECG) was ordered to look for abnormal heart rhythms, such as atrial fibrillation (Capriotti, 2020).

Diagnostic Test Reference (1) (APA):

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

Current Medications (10 points, 1 point per completed med)
10 <u>different</u> medications must be completed

Home Medications (5 required)

Brand/Generic	FentaNYL PF (Fentanyl)	Labetalol (Trandate)	NiCARdipine (Cardene IV)
Dose	25mcg	10 mg	5-15 mg
Frequency	Q2Hr PRN	Q 10 min PRN	Continuous IV PRN
Route	Injection – IV push	IV infusion	IV injection
Classification	Pharmacological: opioid Therapeutic: Opioid analgesics, anesthetic agent Controlled substance Schedule: II	Pharmacological: Noncardioselective Beta-blocker/ alpha 1 blocker Therapeutic: Antihypertensive	Pharmacological: Calcium channel blocker Therapeutic: antianginal, antihypertensive
Mechanism of Action	Binds to the opioid receptor cite in the CNS, changing the emotional response to pain by inhibiting pain pathways.	Blocks Alpha1 and beta2 receptors to reduce blood pressure and peripheral vascular resistance	Slows the movement of extracellular calcium into myocardial and vascular smooth-muscle cells, which leads to decreased myocardial oxygen requirements and reduced afterload, blood pressure, and peripheral resistance.
Reason Client Taking	Pain	Hypertension	Hypertension
Contraindications (2)	1. Upper airway obstruction 2. Significant respiratory depression	1. Bronchial asthma 2. Cardiogenic shock 3. COPD 4. Severe bradycardia 5. Prolonged hypotension 6. Hypersensitivity to labetalol or its components	1. Advanced aortic stenosis 2. hypersensitivity to nicardipine and it's components. 3. This drug interacts with fentanyl and cause severe hypotension.
Side Effects/Adverse Reactions (2)	1. Agitation 2. Hypotension 3. Apnea 4. Depressed cough reflex	1. Drowsiness 2. Weakness 3. Hypotension 4. Ventricular arrhythmia 5. Elevated liver enzymes	1. Drowsiness 2. Paresthesia 3. Weakness 4. Hypotension 5. Bradycardia

	5. Respiratory depression 6. Weight loss	6. Nausea 7. Vomiting 8. Jaundice 9. Dyspnea 10. Wheezing 11. Itchiness 12. Rash	6. Tachycardia 7. Hyperglycemia 8. Elevated liver enzymes 9. Vomiting 10. Decreased O2 saturation. 11. Upper respiratory tract infection 12. hypokalemia
Nursing Considerations (2)	1. Use cautiously in patients with a history of COPD. 2. Assess for indicators of pain before and for five minutes following administration. 3. Monitor RR and BP frequently during therapy use.	1. When administering during I.V., monitor blood pressure every 5minutes for 30 minutes, then every 30 minutes for 2 hours, then every hour for 6 hours 2. Keep the patient in a supine position for 3 hours after administering. 3. Don't stop the drug abruptly as it can cause rebound hypertension. 4. Check blood glucose often	1. Check BP and pulse prior to administering and periodically during administration 2. Check ECG periodically during administrating. 3. If the medication comes premixed, check the medication strength carefully. 4. Administer the drug through a large peripheral vein or central veins to reduce the possibility of extravasation, irritation, phlebitis, swelling or vascular impairment. 5. Monitor I&O and daily weights for signs of fluid retention. 6. Assess for crackles, dyspnea, JVD, peripheral edema, and weight gain.
Key Nursing Assessment(s)/Lab(s) Prior to Administration	1. Serum amylase and serum lipase 2. Blood glucose 3. Respiratory rate 4. Blood pressure 5. Cardiac monitoring 6. Heart rate	1. Blood pressure 2. Blood glucose 3. Respiratory rate 4. Liver enzymes	1. Blood pressure 2. Pulse 3. Cardia rhythm 4. Liver enzymes 5. Potassium levels 6. O2 saturation 7. Blood glucose
Client Teaching needs (2) • Education should be taught to the family or to the patient once the patient is removed from the ventilator; However, a	1. Instruct the family that vital signs will be monitored during fentanyl use. 2. Inform patient and family about potentially fatal additive effects of fentanyl and benzodiazepine, and to inform the doctor of benzo use prior to administrating.	1. Caution family and patient that stopping labetalol abruptly can cause angina or hypotension. Inform that patient will be tapered from the medicine and monitored while she is inpatient. 2. Instruct the family that vital signs will be monitored during labetalol use.	1. Instruct the family that vital signs will be monitored during labetalol use. 2. Teach family what a normal blood pressure reading is, what normal respirations look like, and what a normal heartrate looks like, and to notify the nurse if any appear abnormal. 3. Advise the patient to notify the nurse if she experiences any

nurse should always explain everything to a sedated patient, including medications that are given and potential side effects.			nausea, dizziness, heart palpitations, or swelling in the hands or feet (once she is off the ventilator).

Ondansetron HCL (PF) (Zofran)	Propofol (Diprivan)
4 mg push	10 mg/mL
PRN	Continuous IV
I.M. Injection	IV infusion
Pharmacological: Selective serotonin receptor antagonist Therapeutic: Antiemetic	Pharmacological: Phenol-derivative Therapeutic: sedative-hypnotic
Blocks serotonin receptors peripherally at the vagal nerve terminals in the intestines to prevent nausea and vomiting.	Decreased blood flow, metabolic oxygen consumption, intracranial pressure, and increases cerebrovascular resistance, which creates a hypnotic effect.
To reduce the patient from vomiting while on the vent, which can cause ventilator-acquired pneumonia.	Sedation while the patient is on the ventilator
1. Hypersensitivity to ondansetron or its components 2. Concomitant use of apomorphine	1. Hypersensitivity to propofol or its components 2. Hypersensitivity to eggs products, soybeans, or soy products
3. Restlessness 4. Seizures 5. Weakness 6. Arrythmia 7. Bronchospasm 8. Shortness of breath 9. Hiccups	1. Bradycardia 2. Hypotension 3. Nausea 4. Vomiting 5. Apnea 6. Anaphylaxis
1. Monitor the patient closely for serotonin syndrome. 2. Monitor the patient's electrocardiogram (ECG) looking for prolonged QT intervals.	1. Use propofol cautiously in patient at risk for intracranial pressure because this drug may aggravate this disorder. 2. Dilute propofol using D5W, if the propofol dose is over 2mg/mL 3. Use an infusion pump for safe administration
1. ECG 2. Potassium levels 3. Magnesium levels	1. Blood pressure 2. Heart rate 3. Respiratory rate
1. Advise the patient to immediately report sign of hypersensitivity, such as rash. 2. Advise patient to seek immediate medical attention if they experience persistent, severe, unusual, or worsening symptoms.	1. Urge the patient's family to voice concerns and ask questions prior to administering. 2. Ensure the family and patient that vital signs will be monitored and supported as needed.

Hospital Medications (5 required)

Brand/Generic	Acetaminophen (Tylenol) tablet	Calcium carbonate (Tums)	Lisinopril (Prinivil)	N/A	N/A
Dose	500 mg	1000 mg (2 tablets x 500mg)	20 mg	N/A	N/A
Frequency	Q 4hr PRN	Q 6 hr PRN	Daily	N/A	N/A
Route	Oral	Oral	Oral	N/A	N/A
Classification	Analgesic/ nonsalicylate	Pharmacological: calcium salts Therapeutic: antacids	Pharmacological: ACE inhibitor Therapeutic: Antihypertensive	N/A	N/A
Mechanism of Action	Inhibits the enzymes cyclooxygenase, blocking prostaglandin production and interfering with pain impulse generation in the peripheral nervous system.	Neutralizes stomach acid to relieve comfort caused by hyperacidity	This medication decreases blood pressure by inhibiting angiotensin I from converting into angiotensin II, which decreased the release of aldosterone. Since the aldosterone is decreased, this reduces sodium and water reabsorption, which reduces blood pressure by increasing excretions.	N/A	N/A
Reason Client Taking	Mild-moderate muscle pain	To help with occasional upset stomach after eating	Hypertension	N/A	N/A
Contraindications (2)	1. Severe hepatic impairment 2. Severe active liver disease	1. Hypercalcemia 2. Hypersensitivity to calcium salts or their components 3. Hypophosphatemia	1. Diabetic patients 2. Hereditary or idiopathic angioedema 3. Use of neprilysin inhibitor withing 36 hours of using lisinopril	N/A	N/A
Side Effects/Adverse Reactions (2)	1. Hypertension 2. Atelectasis 3. Dyspnea 4. Muscle spasms	1. Hypotension 2. Hypercalcemia 3. Nausea 4. vomiting	1. confusion 2. TIA 3. Arrythmia 4. Hypotension 5. Bronchospasm 6. Dyspnea 7. Upper respiratory infection	N/A	N/A

Nursing Considerations (2)	1. Use acetaminophen cautiously in patients with severe renal impairment. 2. Monitor the patient for hepatotoxicity	1. Monitor serum calcium. 2. Assess for Chvostek's and Trousseau's sign	1. Monitor the patient's blood pressure often, especially after the initial 2 weeks of taking lisinopril. 2. Monitor serum creatinine, potassium, and glucose levels closely	N/A	N/A
Key Nursing Assessment(s)/Lab(s) Prior to Administration	1. AST 2. ALT 3. Bilirubin 4. Creatinine levels 5. Monitor renal function	1. Serum calcium levels 2. Serum phosphorous levels 3. Blood pressure 4. Assess for Chvostek's and Trousseau's sign	1. Blood pressure 2. Blood glucose 3. Potassium 4. Creatinine 5. Liver enzymes	N/A	N/A
Client Teaching needs (2)	1. Instruct the patient to read the manufacturer's label and follow dosage guidelines precisely. 2. Caution the patient not to exceed the recommended dosage or take other drugs containing acetaminophen at the same time due to the risk of liver damage. 3. Advise the patient to contact their prescriber before taking other prescriptions or over-the-counter products.	1. Urge the patient to chew chewable tablets thoroughly before swallowing and to drink a glass of water afterward. 2. Instruct patients to take calcium carbonate tablets 1 to 2 hours after meals.	1. Explain that lisinopril helps to control, but does not cure hypertension. 2. Advise the patient to take lisinopril at the same time every day. 3. Caution patients to not use salt substitutes that contain potassium	N/A	N/A

Medications Reference (1) (APA)

Jones & Bartlett Learning, LLC. (2021). *2021 Nurse's Drug Handbook*. Burlington, MA: Jones & Bartlett Learning.

Assessment

Physical Exam (18 points) – HIGHLIGHT ALL PERTINENT ABNORMAL FINDINGS

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	The patient was neither alert nor oriented due to being sedated while on a ventilator. The patient was able to respond to questions occasionally by nodding or shaking her head. The patient was also able to follow simple commands when under sedation including, wiggling her toes and gripping the nurse's fingers. The patient expressed did not appear to be in any distress as she present with relaxed and neutral facial expressions, relaxed muscle tone, and tolerated the ventilator and movement well.
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:**	Skin is appropriate for ethnicity. Dry and intact without rashes or lesions Skin is cool to the touch. Normal turgor found near right clavicle bone. No rashes were found on the body. Many small normal bruising found on the legs form older age. The color of the bruises were dark brown and all had a diameters smaller than a quarter. The patient had a purpley-red bruise on her left anterior forearm approximately 6 cm in length from an attempted IV insertion in the ED. The patient did not present with any edema. The patient had a small would, approximately the size of a dime, on her suprapubic region, form a thrombectomy performed on 3/4/24. 11 No drains present.

	Skin interventions for this patient include specialty bed use with a pressure-resistant mattress and turning and using weight assistance every 2-4 hours.
HEENT: **Head/Neck:**	The head is normocephalic and atraumatic without tenderness, visible or palpable masses, depressions, or scarring. Hair is of normal texture, appears white, and is evenly distributed, but is thin due to age. The neck appeared normal in size without abnormal swelling glands. The trachea is midline. The carotid pulse was not taken.
Ears:	The ears are symmetrical to the patient's head. No ear drainage was noted. The external ear was not tender to the touch, nor was there any skin breakdown from the ear canal noted. The patient was able to hear and follow simple commands while sedated.
Eyes:	Eyes are located in the proper place on the patient's face. No eye drainage was noted. Eyelids are normal in appearance without swelling or lesions. The sclera appears to be white in color. EOMs are intact and PERRLA is normal. The patient's pupils were 3 mm and reacted equally to light. The patient received lubricating eye ointment twice a day to prevent cornea scratches while sedated.
Nose:	The nose is located in the proper place on the patient's face. The nasal septum is in the midline. No nose drainage or mucous was noted. No breakdown of skin tissue surrounding the nose from the nasal cannula.
Teeth:	No abnormal discoloration of the mouth was noted. The oral mucosa was pink, and moist throughout the mouth, appropriate with ethnicity. The patient's tonsils and uvula were not assessed due to the patient being on a ventilator. Oral care was provided to the patient approximately at 0920 am and the ET tube was repositioned to the right side of her mouth.
CARDIOVASCULAR:	The external chest is normal in appearance

Heart sounds: **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):**	without lifts or heaves. PMI is not visible and is palpated over the 5th intercostal space. No murmurs, gallops, or rubs were found during auscultation. S1 and S2 are heard and are of normal intensity. The patient does have a pacemaker on the left side of her chest.
Peripheral Pulses:	The peripheral pulses were equal x 2.
Capillary refill:	Capillary refills are less than 3 seconds. The nail beds do not appear to have any cyanosis, pitting, or clubbing.
Neck Vein Distention: Y ☐ N ☒	No jugular vein distension was noted.
Edema Y ☐ N ☒ **Location of Edema:**	No edema was noticed on the upper or lower extremities bilaterally.
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	No accessory muscles used to breathe The chest wall is symmetric and without deformities. No signs of trauma or respiratory distress. The chest wall is not tender. Lungs sound clear in all the lobes, found on the right and left anterior sides of the body. No crackling or wheezing was noted.
ET Tube: **Size of tube:** **Placement (cm to lip):** **Respiration rate:** **FiO2:** **Total volume (TV):** **PEEP:** **VAP prevention measures:**	The patient had an ET placed, which was a size 8 and located on the right side of her lips at 22 cm. Upon assessment of the patient and the ventilator, the patient's respirations were at 14, the FiO2 was at 40%, the total volume was 450 mL, and the PEEP was an 8. VAP prevention measures for this patient included increasing the head of the bed to 30 degrees, frequent suctioning, prophylactic ondansetron, and routine oral care.
GASTROINTESTINAL: **Diet at home:**	The patient current home diet was not listed in the chart and the patient could not be asked due to being sedated.
Current Diet	The patient was on an NPO diet due to being on a ventilator while in the hospital.
Height:	154.9 cm (5'1")

Weight:	52.2 kg (115 lbs)
Auscultation Bowel sounds:	Bowel sounds are present and normoactive in all four quadrants.
Last BM:	The patient's last BM was not determined, as the patient had not had bowel movement since being admitted to the hospital.
Palpation: Pain, Mass etc.: **Inspection:**	The abdomen is soft and symmetrical. Umbilicus does not have herniation and is located midline. A normal pulse was found in the midline of the abdomen. No masses, enlarged liver, enlarged spleen are noted.
Distention:	No distention was observed.
Incisions: **Scars:** **Drains:** **Wounds:**	A small surgical wound was found on the right suprapubic region of the patient from the thrombectomy. There was no sign of infection present, including no warmth, redness, abnormal drainage, and swelling. The nurse will continue to monitor the site. No scars were observed on the patient. The patient does not have any drains. The patient does not have any visible wounds in any quadrants on the stomach.
Ostomy: Y ☐ N ☒ **Nasogastric: Y ☒ N ☐** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	The patient does not have an ostomy. The patient has an NG tube at 57 cm in length, which was placed on 3/5/24. The patient did not have a PEG or feeding tube.
GENITOURINARY: **Color:**	Darkish yellow
Character:	hazy
Quantity of urine:	The patient excreted 220 mL of urine in a 6 hour

	time frame.
Pain with urination: Y ☐ N ☒	The patient indicated no sign of pain or discomfort from the catheter.
Dialysis: Y ☐ N ☒	The patient was not on dialysis.
Inspection of genitals:	No external masses or lesions. External genitalia was normal in appearance without swelling, masses, or tenderness. A small surgical wound was found on the right suprapubic region of the patient from the thrombectomy. There was no sign of infection present, including no warmth, redness, abnormal drainage, and swelling. The nurse will continue to monitor the site.
Catheter: Y ☒ N ☐ **Type:** **Size:**	The patient has a Foley catheter in, which was placed on 3/4/24. The size and type of the catheter was a 16 FR indwelling catheter.
CAUTI prevention measures:	CAUTI prevention measures used for this client included avoiding unnecessary us of the catheter and limiting the duration of use when needing to access it, keeping the collection chamber lower than the patient's bladder, emptying and measuring the output regularly, monitoring for signs and symptoms of infection, and adhering to hospital protocols following cleanliness and safety.
MUSCULOSKELETAL: **Neurovascular status:**	Capillary refills on the fingers and toes were less than 3 seconds bilaterally. Skin was cool to the touch, and dry.
ROM:	Passive range of motion was provided for this patient during clinicals.
Supportive devices:	The patient does not use any supportive devices when normally active and mobile.
ADL Assistance: Y☐ N ☒	The patient does not need ADL assistance normally, other than glasses to see.
Fall Risk: Y ☐ N☒ **Fall Score:**	The patient does not have a fall score because she is currently sedated. Fall mats were placed by the bed as a precaution though.

Strength:	The patient has equal strength of +5 bilaterally in both upper and lower extremities on the right side, but the strength was slightly diminished for both the upper and lower extremities on the left side at +3.
Activity/Mobility Status: **Independent (up ad lib)** ☐ **Needs assistance with equipment** ☐ **Needs support to stand and walk** ☐	The patient was currently sedated due to being on a ventilator, but normally can move independently before the stroke. The patient might need assistance and potential support equipment to walk once she is taken off from the ventilator.
NEUROLOGICAL: **MAEW: Y ☒ N☐**	The patient can move all extremities well with a passive range of motion, as well as follow verbal commands to do so.
PERLA: Y ☒ N☐	EOMs are intact and PERLA was normal, with the pupils constricting appropriately to 3 mm to light.
Strength Equal: Y ☒ N ☒ if no - **Legs ☐ Arms ☐ Both ☒**	The patient has equal strength of +5 bilaterally in both upper and lower extremities on the right side, but the strength was slightly diminished for both the upper and lower extremities on the left side at +3.
Orientation:	The patient was neither alert nor oriented since she was sedated. The patient's Glasgow coma scale was an 8.
Mental Status:	The patient's mental status and developmental level could not be properly assessed due to sedation.
Speech:	The patient's speech could not be properly assessed due to sedation.
Sensory:	The patient's memory could not be properly assessed due to sedation.
LOC:	The patient has not experienced any loss of consciousness recently, according to the chart, but the patient was currently under sedation at the time of the assessment.

PSYCHOSOCIAL/CULTURAL: **Coping method(s):** **Developmental level:** **Religion & what it means to pt.:** **Personal/Family Data (Think about home environment, family structure, and available family support):**	The patient's psychological and cultural aspects could not be determined or assessed due to the patient being on a ventilator and sedated. No mention of the patient's coping methods, current development level, religion, and support systems were listed in the chart.

Vital Signs, 2 sets (5 points) – HIGHLIGHT ALL ABNORMAL VITAL SIGNS

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0700	54 bpm	135/52	16	36.4 C (97.5 F) Axillary	99%
1130	58 bpm	128/58	14	36.6 C (97.9 F)	99%

Vital Sign Trends/Correlation:

Although the vitals are still abnormal, the heart rate, blood pressure, and temperature increased from the first and second set of vitals. The patient has a history of hypertension, so high blood pressure is not abnormal for her. The patient's increased blood pressure decreased respiration rate, and decreased temperature could be occurring because of the patient's diagnosis of a stroke and the patient being put on a ventilator.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions

0700	CPOT	N/A	0	Appears asleep (0-relaxed, neutral facial expression, 0-absence of movements, 0-relaxed muscle tone, 0-tolerating ventilator d movement well)	Sedation, pain meds PRN, lights off (low stimuli environment), and clustered care.
1130	CPOT	N/A	0	Appears asleep (0-relaxed, neutral facial expression, 0-absence of movements, 0-relaxed muscle tone, 0-tolerating ventilator d movement well)	Sedation, pain meds PRN, lights off (low stimuli environment), and clustered care.

IV Assessment (2 Points)

IV Assessment	**Fluid Type/Rate or Saline Lock**
Size of IV I: 20 G **Location of IV:** Anterior left lower forearm **Date on IV:** 3/4/24 **Patency of IV:** Intact **Signs of erythema, drainage, etc.:** No signs of erythema, drainage, or infection noted. **IV dressing assessment:** The dressing is in place, clean, dry, and intact. **Size of IV II:** 20 G **Location of IV:** Posterior right lower forearm **Date on IV:** 3/4/24 **Patency of IV:** Intact **Signs of erythema, drainage, etc.:** No signs of erythema, drainage, or infection noted. **IV dressing assessment:** The dressing in place, clean, dry, and intact.	In the IV in the anterior left lower forearm, the patient was receiving 5 mg of Nicardipine at a flow rate of 0.5 mL/hr, and 0.9% NaCl at 75 ml/hr. In the IV in the posterior right lower forearm, the patient was receiving 10 mg of propofol at 0.8 mL/hr and 10 mg of Labetalol at 1-2 mg/min.

Other Lines (PICC, Port, central line, etc.)	
Type:	N/A
Size:	N/A
Location:	N/A
Date of insertion:	N/A
Patency:	N/A
Signs of erythema, drainage, etc.:	N/A
Dressing assessment:	N/A
Date on dressing:	N/A
CUROS caps in place: Y ☐ N ☐	N/A
CLABSI prevention measures:	N/A

Intake and Output (2 points)

Intake (in mL)	**Output (in mL)**
375 mL in 0.9% NaCl 125 mL of D5w (for dilution of propofol) 20 mL of sterile water for medication administration Total: 520 mL	220 mL in urine 110 mL in secretion Total: 330 mL

Nursing Care

Summary of Care (2 points)

Overview of care:

Overview of care for this patient did not include much hand on action as with a medical surgical patient, since most of the shift was consisting of assessing the monitoring the patient's status. Nursing interventions were performed though, consisting of administering medications, providing oral care, repositioning the patient's ET tub, suctioning as needed, doing a physical

assessment, taking vitals, monitoring the patient's tolerance to the ventilator, and preparing and transferring the patient to MRI.

Procedures/testing done:

During clinical, the patient had new labs and electrolytes drawn, including lipid panel. The patient also had an ABG performed and was taken down to MRI. The results for the MRI were not completed by the end of clinical.

Complaints/Issues:

The patient was sedated during clinical, so no complaints or issues were gathered from her. Family was not present during clinical, but communication with her about consent for an MRI was gathered over the phone. The daughter did not have any complaints during the time of the phone call.

Vital signs (stable/unstable):

Throughout the shift, the vitals for heart rate, blood pressure, and temperature were unstable. Although the vitals are still abnormal, the heart rate, blood pressure, and temperature increased from the first and second set of vitals. The patient has a history of hypertension, so high blood pressure is not abnormal for her. The patient's increased blood pressure decreased respiration rate, and decreased temperature could be occurring because of the patient's diagnosis of a stroke and the patient being put on a ventilator.

Tolerating diet, activity, etc.:

During clinical, the tolerating diet for this patient was NPO, and the activity consisted of passive range of motion because the patient was sedated and on a ventilator.

Physician notifications:

Future plans for client:

No future plans existed for this client yet, other than to monitor and wait. The nurse mentioned that they would like to see the patient off the vent by 3/8/24 at the latest for an injury like this. The nurse is aware that they will have to make referrals to social work, physical therapy, and speech therapy for this patient prior to discharge.

Discharge Planning (2 points)

As of the time of clinical, there was no set date for discharging. However, since the patient had a stroke, the nurse can anticipate there will be assistance needs and educational needs for this patient. Once this patient gets closer to being discharged, the nurse needs to make referrals to physical therapy, rehabilitation centers, home health agencies, speech and language therapists, occupational therapists, mental health therapists, and social workers. Once the patient is removed from the ventilator, the nurse needs to provide teaching to the patient including warning signs and symptoms of strokes when to seek medical help, interventions for safe swallowing and aspiration prevention methods post-stroke, the importance of minimizing smoking, managing hypertension, reducing sodium intake, how to and how often to take their blood pressure, and the importance of compliance to post-stroke therapies and medication regimens. Following the teaching, the nurse needs to assess the patient's level of understanding of the teaching the patient's understanding of the importance of compliance to therapies and medications.

Nursing Diagnosis (15 points)
Must be NANDA approved nursing diagnosis and listed in order of priority

Nursing Diagnosis	**Rationale** • Explain	**Interventions (2 per dx)**	**Outcome Goal (1 per dx)**	**Evaluation** • How did

• Include full nursing diagnosis with “related to” and “as evidenced by” components • Listed in order by priority – highest priority to lowest priority pertinent to this client	why the nursing diagnosis was chosen			the client/family respond to the nurse’s actions? • Client response, status of goals and outcomes, modifications to plan.

1. Ineffective tissue perfusion related to inefficient tissue perfusion as evidenced by a subdural hematoma being present on a CT	Since this patient had a subdural hematoma and a stroke, this patient has insufficient blood flow, which restricted adequate perfusion to the body.	a. Determine the risk this patient poses for increased intracranial pressure b. Monitor and document neurologic status and vitals frequently and compare to baseline. **c.** Have the patient maintain bed rest, elevate the head of the bed to 30 degrees, provide a quiet environment, and clustering care.	1. Maintenance of neurologic status. 2. Stable vital signs and no evidence of increased ICP. 3. No further deterioration in neurologic status or condition	The patient tolerated interventions well, but the patient's family was not present at bedside, and the patient was not awake to determine their response.
2. Risk for aspiration related to the patient being on a ventilator, being on propofol for sedation, and having a	The patient being under sedation and having an ET tube, this eliminates her cough reflex and can cause pooling of secretions about the ET tube	1. Suction the patient frequently, noting color, consistency, and quantity of secretions 2. Administer ondansetron to prevent the client from vomiting from the sedation,	1. The patient will not aspirate or vomit by the time the patient is taken off the ventilator and the patient will re-learn how to properly swallow without aspirating.	The patient tolerated interventions well, but the patient's family was not present at bedside, and the patient was not awake to determine their response.

stroke as evidence by the patient having an ET tube and aphasia prior to admittance.	cuff, which can cause her to aspirate. If the client aspirates, this can lead to the patient getting an infection or possibly dying, if not handled correctly.	which can be aspirated. 3. Make a referral to speech-language therapy once the patient is off of the ventilator to help the patient learn to swallow again to prevent aspiration.		
3. Risk for infection related to ventilator use as evidence by the patient' elevated white blood count level	Due to the use of a ventilator, this poses a risk for the patient to get an infection because it is invasive.	1. Elevate the head of the bed to 30 degrees. 2. Frequently suction the patient 3. Provide routine oral care.	1. The client will have white blood cells within normal ranges and no signs or symptoms of infection.	The patient tolerated interventions well, but the patient's family was not present at bedside, and the patient was not awake to determine their response.
4. Risk for impaired mobility related to the right-sided stroke as evidenced by the patient exhibiting left-sided weakness prior to the	Since the patient had a right-sided stroke and presented with left-sided weakness prior to being admitted to the hospital and while sedate, the patient is as	1. Perform frequent neurovascular and musculoskeletal assessment on the patient both when she is sedated and once she is off the ventilator. 2. Make a referral to physical therapy to	1. The patient will have a neurovascular assessment and musculoskeletal assessment within range, as well as being compliant attending physical therapy to improve mobility.	The patient tolerated interventions well, but the patient's family was not present at bedside, and the patient was not awake to determine their response.

stroke and during the hospital stay.	risk for continual weakness and impaired mobility once she gets taken off the ventilator	help the patient adjust to the physical motor changes that can occur from a stroke.		
5. Risk for self-care deficit related to lack of exposure and altering her lifestyle as evidence d by not having a history of a stroke.	Since this patient has not had a stroke before, she will need to make lifestyle changes, which can be difficult sometimes. These changes can pose a risk to her since it would be new to her and different from her normal habits.	1. Teach and reinforce the importance of how new lifestyle change (diet, supportive device use, and activity level) can affect her recovery process and her day-to-day life. 2. Teach and reinforce the importance of taking medication as prescribed, especially to control blood pressure. **3.** Teach and reinforce the importance of adhering to follow-up appointments.	1. The patient will understand the teaching the nurse has provided and will exhibit compliance by her follow up appointment.	The tolerance and response could not be examined as the patient was not off the ventilator yet, nor was family present to receive the teaching.

Other References (APA):

Concept Map (20 Points):

NANDA diagnostic List For Basic Human Needs | Nanda Nursing Diagnosis List. (2020). http://nandanursingdiagnosislist.org/nanda-diagnostic-list-for-basic-human-needs/#:~:text=NANDA%20diagnostic%20List%20For%20Basic%20Human%20Needs%201

Swearingen, P. L. (2008). *All-in-one care planning: medical-surgical, pediatric, maternity, and psychiatric nursing care plans*. Mosby/Elsevier.

Subjective Data

- The patient's chief complaint was "left-sided facial drooping and left-sided weakness."

Nursing Diagnosis/Outcomes

1. Ineffective tissue perfusion related to inefficient oxygen perfusion as evidenced by a subdural hematoma being present on a CT.
2. Risk for aspiration related to the patient being on a ventilator and on propofol for sedation.
3. Risk for infection related to ventilator use as evidence by the patient' elevated white blood count level.
4. Risk for impaired mobility related to the right-sided stroke as evidenced by the patient exhibiting left-sided weakness prior to the stroke and during the hospital stay.
5. Risk for self-care deficit related to lack of exposure and altering her lifestyle as evidenced by not having a history of a stroke.

Objective Data

- Pulse was 54 @ 0700; 58 @ 1130
- Bp: 135/52 @ 0700; 128/58 @ 1130
- RR: 16 @ 0700; 14 @ 1130
- Temp: 36.4 C (axillary) @ 0700; 36.6 C (axillary) @ 1130
- SpO2: 99% (on a ventilator) @ 0700 & 1130
- FiO2: 40%
- Total volume (TV): 450mL
- PEEP: 8

Client Information

- Age: 80 years old
- Gender: Female
- Race/ethnicity: White
- Marital status: Widower
- Height: **154.9 cm**
- Weight: 52.2 kg
- Code status: full code
- Occupation: Part-time at Casey's General Store in Hoopeston, IL

1. Determine the risk this patient poses for increased intracranial pressure
2. Monitor and document neurologic status and vital signs frequently and compare to baseline
3. Have the patient maintain bed rest, elevate the head of the bead to 30 degrees, provide a quiet environment, and cluster care.
4. Suction the patient frequently, noting/documenting color, consistency, and quantity of secretions
5. Administer ondansetron to prevent the client from vomiting from the sedation, which can be aspirated.
6. Make a referral to speech-language therapy once the patient is off of the ventilator to help the patient learn to swallow again to prevent aspiration.
7. Frequently suction the patient
8. Provide routine oral care.
9. Perform frequent neurovascular and musculoskeletal assessment on the patient both when she is sedated and once she is off the ventilator.
10. Make a referral to physical therapy to help the patient adjust to the physical motor changes that can occur from a stroke
11. Teach and reinforce the importance of how new lifestyle change (diet, supportive device use, and activity level) can affect her recovery process and her day-to-day life.
12. Teach and reinforce the importance of taking medication as prescribed, especially to control blood pressure.
13. Teach and reinforce the importance of adhering to follow-up appointments