N431 Care Plan #1

Lakeview College of Nursing

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Demographics (3 points)

Date of Admission	**Client Initials**	**Age**	**Gender**
9/5/2022	ED	69	Male
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
Black/African-American	Not employed	Single, per chart review	Hydralazine, Nitroglycerin, Clonidine HCl, Penicillin
Code Status	**Height**	**Weight**	
Full	6'0	63.8kg	

Medical History (5 Points)

Past Medical History: hypertension, AV block unidentified degree, MI x2, hyperlipidemia, PAD, sinus bradycardia, claudication, CVA, bilateral carotid stenosis

Past Surgical History: CABG, left sided heart catheterization, lumbar discectomy, nasal sinus surgery, upper GI endoscopy, vein surgery, bilateral temporal artery biopsy

Family History: unable to assess, patient is sedated, and family history not recorded in EHR

Social History (tobacco/alcohol/drugs including frequency, quantity and duration of use): former cigarette smoker for 10 years back in the 1980's less than a pack per day. Last alcohol intake reported by patient is in 2008. No drug use recorded in EHR.

Assistive Devices:

Living Situation: Unable to assess, patient is sedated, and family history not recorded in EHR. The patient's daughter said that the patient lives with his "wife" at home, with no pets.

Education Level: unable to assess, patient is sedated, and family history not recorded in EHR

Admission Assessment

Chief Complaint (2 points): Fall into the bathtub

History of Present Illness – OLD CARTS (10 points): The patient presented to the Emergency department on 9/5/2022 after a fall on 9/4/2022. The patient reported hitting his head and left

shoulder and no loss of consciousness. The patient reported pain in the back of the neck and left shoulder. On 9/5/2022, at 1844, the patient denied the presence of pain, and per EHR, showed no nonverbal indication of pain. The duration, alleviating factors, relieving factors and severity were not recorded in the EHR during the emergency department workup, and is unable to be assessed currently because the patient is sedated.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): acute on chronic intracranial subdural hematoma

Secondary Diagnosis (if applicable): N/A

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

Blood vessels are composed of smooth muscle cells that constrict and contract depending on the physiological need. They also hold blood in the bloodstream. As with all types of tissues, blood vessels can suffer mechanical trauma, and can rupture. A subdural hematoma is a condition where blood accumulates under the dura mater, one of the brain's main protective layer (Pierre & Kondamudi, 2022). Symptoms that accompany an acute subdural hematoma are headache, confusion, and lightheadedness. At the emergency department, the patient complained of a headache and shoulder pain after falling into his bathtub and hitting his head. CT scans and MRIs can be employed to visualize brain tissue and different conditions, including a subdural hematoma. The physician confirmed the diagnosis of acute subdural hematoma through the interpretation of the patient's head CT without contrast. Craniotomy is one medical intervention used to manage acute subdural hematomas (Manivannan et al., 2021). The purpose of a craniotomy is to relieve the pressure exerted by fluid accumulation at the site of injury. If the pressure is unrelieved, the brain stem can be affected and cause fatal disturbance in basic

physiological processes like breathing and thermoregulation. It consists of the evacuation of fluid out of the skull to provide enough space for the brain. The patient subdural hematoma with midline shift was treated by craniotomy and is currently under sedation.

Pathophysiology References (2) (APA):

Manivannan, S., Spencer, R., Marei, O., Mayo, I., Elalfy, O., Martin, J., & Zaben, M. (2021). Acute subdural haematoma in the elderly: to operate or not to operate? A systematic review and meta-analysis of outcomes following surgery. *BMJ Open*, *11*(12), e050786. https://doi.org/10.1136/bmjopen-2021-050786

Pierre, L., & Kondamudi, N. P. (2022). Subdural Hematoma. In *StatPearls*. StatPearls Publishing.

Laboratory Data (15 points)

CBC 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 Value
RBC	4.10 - 5.70 10:6/ uL	3.72	3.06	Low RBC count can be caused by recent blood loss, which is true for the patient's recent head trauma and surgery (Mayo Foundation for Medical Education and Research, 2022).
Hgb	12.0 – 18.0 g/dL	10.6	8.8	Low hemoglobin can be caused y recent injury and inadequate nutrition Cleveland Clinic Staff (2022). These are both applicable to the patient due to a subdural hematoma.
Hct	37.0 – 51.0 %	33.5	26.5	A low hematocrit value can be caused by recent or chronic blood loss (Mayo Foundation for Medical Education and Research, 2021). This is consistent with the patient's recent cranial

				surgery, and constant blood loss from JP drain.
Platelets	140 – 400 10:3/uL	216	180	
WBC	4.0 – 11.0 10:3 uL	6.42	9.43	
Neutrophils	%	N/A	N/A	
Lymphocytes	%	17.8	15.3	
Monocytes	%	7.5	10.0	
Eosinophils	%	6.5	0.8	
Bands	%	0.2	0.2	

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 – 145 mmol/L	140	149	The patient is receiving a hypertonic IV fluid, which can cause an elevated sodium level (Capriotti & Frizzell, 2020).
K+	3.5 – 5.1 mmol/L	4.0	3.9	N/A
Cl-	98 – 107 mmol/L	110	121	Administration of IV fluids on critically ill patients like ED can result in the fluid-base disturbance, resulting in hyperchloremia (Kilic et al., 2020).
CO2	22.0 – 29.0 mmol/L	19.0	20.0	Low CO2 levels is a common observation in critically-ill patients (Capriotti & Frizzell, 2020).
Glucose	74 – 100 mg/dL	100	142	The patient receives constant OG/NG tube feeding. His elevated blood sugar may be considered as prediabetes since it is greater than 140 mg/dL (Capriotti & Frizzell, 2020).
BUN	8 - 26 mg/dL	13	14	N/A
Creatinine	0.55 – 1.30 mg/dL	1.2	1.18	N/A

Albumin	3.4 – 4.8 mg/dL	3.5	N/A	N/A
Calcium	8.9 – 10.6 mg/dL	8.9	7.7	Hypocalcemia can be caused by poor nutritional status, which is definitely possible due to the patient's tube feeding diet (Capriotti & Frizzell, 2020).
Mag	1.6 – 2.6 mg/dL	N/A	1.9	N/A
Phosphate	2.3 -4.7 mg/ dL	N/A	2.9 as of 9/12/2022	N/A
Bilirubin	0.2 -12 mg/ dL	0.3	N/A	N/A
Alk Phos	40 -150 U/L	67	N/A	N/A
AST	5-34 U/L	16	N/A	N/A
ALT	0 – 55 U/L	17	N/A	N/A
Amylase	N/A	N/A	N/A	N/A
Lipase	N/A	N/A	N/A	N/A
Lactic Acid	N/A	N/A	N/A	N/A
Troponin	N/A	N/A	N/A	N/A
CK-MB	N/A	N/A	N/A	N/A
Total CK	N/A	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 ratio	1.1	N/A	N/A
PT	11.7 – 13.8 seconds	13.5	N/A	N/A
PTT	22.4 – 35.9	33.8 as of	N/A	N/A

	seconds	9/11/2022		
D-Dimer	N/A	N/A	N/A	N/A
BNP	N/A	N/A	N/A	N/A
HDL	N/A	N/A	N/A	N/A
LDL	N/A	N/A	N/A	N/A
Cholesterol	N/A	N/A	N/A	N/A
Triglycerides	< 150 mg/dL	N/A	106 as of 9/12/2022	N/A
Hgb A1c	N/A	N/A	N/A	N/A
TSH	N/A	N/A	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	N/A	Yellow and clear	N/A	N/A
pH	5.0 – 9.0	5.5	N/A	N/A
Specific Gravity	1.003 – 1.030	1.019	N/A	N/A
Glucose	Negative	negative	N/A	N/A
Protein	Negative	negative	N/A	N/A
Ketones	Negative	negative	N/A	N/A
WBC	Negative	negative	N/A	N/A
RBC	Negative	negative	N/A	N/A
Leukoesterase	Negative	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	7.350 – 7.450	N/A	7.486	The patient is in metabolic alkalosis, which can be caused by gastric suctioning, which is being performed on the patient regularly (Capriotti & Frizzell, 2020).
PaO2	80 – 100 mmHg	N/A	135.4	PaO2 describes the amount of O2 dissolved in the blood (Hinkle & Cheever, 2022). The patient is receiving oxygen from a mechanical ventilator, which can cause a higher than normal oxygen levels in the blood.
PaCO2	35.0 - 45.0 mmHg	N/A	27.1	Low PaCO2 can be caused by CO2 excessive loss of CO2 (Capriotti & Frizzell, 2020). The patient is in mechanical ventilation, which can contribute to the excessive loss of CO2, without it being recovered through room air.
HCO3	22.0 – 26.0 mmol/L	N/A	20.0	The patient is in respiratory alkalosis, which can be caused by alveolar hyperventilation (Capriotti & Frizzell, 2020).
SaO2	%	N/A	98%	

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	Negative	N/A	N/A	N/A
Blood Culture	Negative	N/A	N/A	N/A
Sputum Culture	Negative	N/A	N/A	N/A
Stool Culture	Negative	N/A	N/A	N/A
Other Cultures	Per chart review, the patient's skin flaps on his head are being tested for bacterial colonization. However, these cultures are still in process.			

Lab Correlations Reference (1) (APA):

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

Cleveland Clinic Staff (2022). *Low hemoglobin: Causes, signs & treatment*. Retrieved September 16, 2022, from https://my.clevelandclinic.org/health/symptoms/17705-low-hemoglobin

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

Kilic, O., Gultekin, Y., & Yazici, S. (2020, September 30). The impact of intravenous fluid therapy on acid-base status of critically-ill adults: A Stewart approach-based perspective. *International Journal of Nephrology and Renovascular Disease*. Retrieved September 16, 2022, from https://www.dovepress.com/the-impact-of-intravenous-fluid-therapy-on-acid-base-status-of-critica-peer-reviewed-fulltext-article-IJNRD#

Mayo Foundation for Medical Education and Research. (2021, December 14). *Hematocrit Test*. Mayo Clinic. Retrieved September 16, 2022, from https://www.mayoclinic.org/tests-procedures/hematocrit/about/pac-20384728#:~:text=A%20lower%20than%20normal%20hematocrit,or%20long%2Dterm%20blood%20loss

Mayo Foundation for Medical Education and Research. (2022, May 24). *Low hemoglobin count causes*. Mayo Clinic. Retrieved September 16, 2022, from https://www.mayoclinic.org/symptoms/low-hemoglobin/basics/causes/sym-20050760

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

Coronavirus-19 PCR	Normal value is not detected. The patient's test result is not detected as of 9/12 2022.
Cervical Spine CT, no contrast	Physician interpretation: no fracture.
Brain CT, no contrast	Physician interpretation: right subdural hematoma

Diagnostic Test Correlation (5 points):

CT scans of the brain can show the presence of a subdural hematoma in patients who just experienced a traumatic brain injury (Manivannan et al., 2021). The patient was officially diagnosed with acute on chronic subdural hematoma.

Diagnostic Test Reference (1) (APA):

Manivannan, S., Spencer, R., Marei, O., Mayo, I., Elalfy, O., Martin, J., & Zaben, M. (2021). Acute subdural haematoma in the elderly: to operate or not to operate? A systematic review and meta-analysis of outcomes following surgery. *BMJ Open*, *11*(12), e050786. https://doi.org/10.1136/bmjopen-2021-050786

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

Home Medications (5 required)

Brand/Generic	Zofran/ondansetron	Cozaar/ losartan	Advil/Ibuprofen	Aspirin - dipyridamole	Brilinta/ ticagrelor
Dose	4mg	50mg	10mg	25-200mg extended release	90mg
Frequency	PRN every 8 hrs	daily	3X daily	Every 12 hrs	Every 12 hrs
Route	oral	oral	oral	oral	oral
Classification	Antiemetics, 5-HT3 antagonist	Angiotensin II receptor blocker, antihypertensive	NSAID, analgesic, anti-inflammatory	Antipyretic, antiplatelet	Antiplatelet, P2Y12 platelet inhibitor
Mechanism of Action	Decreases the incidence and severity of nausea by blocking vagal nerve stimulation (Vallerand et al., 2017)	Inhibits vasoconstriction by blocking Angiotensin II reception in vascular tissue (Jones & Bartlett Learning, LLC, 2021)	Inhibits prostaglandin production by blocking cyclooxygenase activity. This blockage then provides pain relief and reduced inflammation (Jones & Bartlett Learning, LLC, 2021).	Reduces pain, and more importantly, reduces platelet aggregation (Jones & Bartlett Learning, LLC, 2021).	Prevents the activation of platelet by interacting with platelet P2Y12 ADP-receptor (Jones & Bartlett Learning, LLC,

					2021).
Reason Client Taking	The patient takes Zofran in case he feels nauseated or is unable to keep anything down.	The patient has hypertension, so he takes losartan to manage high blood pressure.	The patient takes ibuprofen as needed for fever and pain.	Prevention of blood clots due to A-fib.	Prevention of blood clots due to A-fib.
Contraindications (2)	1. Hypersensitivity to aspartame 2. Use of apomorphine	1. hypersensitivity to losartan 2. low blood pressure	1. angioedema 2. active intracranial hemorrhage	1. active bleeding 2. concurrent use with other bloodthinners or NSAIDs	1. active bleeding 2. history of intracranial hemorrhage
Side Effects/Adverse Reactions (2)	1. Serotonin syndrome 2. QT interval prolongation	1. Hypotension 2. angioedema	1. CVA 2. GI bleeding	1. Increased risk for GI bleeding 2. anemia	1. intracranial bleeding 2. bradycardia including AV block
Nursing Considerations (2)	1. Assess the patient for signs of extrapyramidal effects, such as rigidity, grimacing and other neuromuscular changes (Vallerand et al., 2017) 2. Monitor the patient's EKG for changes in cardiovascular status, especially patients with cardiac history (Vallerand et al., 2017)	1. Losartan may be used with other antihypertensive medications. 2. Losartan may cause renal failure in patients with heart	1. Monitor the patient for signs of cardiac ischemia, especially for patients who have a history of MI. 2. Take caution when using on patients with a history of GI bleeding	1. Assess the patient for signs of tachycardia, and fever. 2. Assess the patient for signs of toxicity. Some sympto	1. The nurse must know that ticagrelor can be administered via an NG tube.

		failure during losartan therapy (Jones & Bartlett Learning, LLC, 2021)	(Jones & Bartlett Learning, LLC, 2021).	ms that should be monitored are hyperventilation, and diarrhea. (Vallerand et al., 2017)	2. Ticagrelor should not be used for patients who have an active intracranial bleed. (Jones & Bartlett Learning, LLC, 2021).
Key Nursing Assessment(s)/ Lab(s) Prior to Administration	Assess for presence of nausea or vomiting	Assess the patient's blood pressure and potassium levels prior to administratoin	Assess the patient's pain level	Determine the patient's platelet count if possible	Assess patients for signs of bleeding and use of other bloodthinners
Client Teaching Needs (2)	1. Educate patient on the administration of ondansetron. 2. Educate patient on the symptoms and signs of serotonin syndrome (Vallerand et al., 2017)	1. Educate the patient to be aware of salt substitutes with potassium, as it may increase the risk	1. Patients must be urged to avoid taking aspirin concurrently with NSAIDs. 2. Ibuprofen may cause cardiac complication	1. Educate patient that only prescribed dose should be taken for prophylactic use of aspirin.	1. Patients must be made aware to stop taking the meidcatio

		for elevated potassium levels. 2. Tell the patient to notify any healthcare provider that may prescribe medication during losartan therapy. (Jones & Bartlett Learning, LLC, 2021)	, so patients must be educated on symptoms like shortness of breath, chest pain, weakness and swelling in legs. (Jones & Bartlett Learning, LLC, 2021)	2. Inform patient and family to make sure let healthcare providers know of aspirin usage, especially for procedures where excessive bleeding may occur. (Vallerand et al., 2017)	n immediately if signs of severe reaction manifest. 2. Patients must take bleeding precautions. (Jones & Bartlett Learning, LLC, 2021).

Hospital Medications (5 required)

Brand/Generic	Tylenol/ acetaminophen	Norvasc/ amlodipine	Liptor/ atorvastatin	Dulcolax / bisacodyl	Fentanyl PF injection
Dose	100mg	5mg	40mg	10mg	25mcg
Frequency	Every 6 hrs	Daily	Daily at bedtime	Daily	Every 3 hrs, PRN
Route	Gastric-tube, parenteral	Oral, but since patient is sedated, gastric tube, parenteral	Gasric-tube, parenteral	Rectal	IV push
Classification	Nonsalicylate, antipyretic, analgesic	Calcium-channel blocker, antihypertensive	HMG-CoA reductase inhibitor, antihyper	Laxatives, stimulant laxative	Opioid, analgesic

			lipidemic		
Mechanism of Action	Blocks prostaglandin production by inhibiting the activity of cyclooxygenase, relieving pain	Inhibits vascular contraction by blocking the influx of calcium ions needed to conduct contraction (Jones & Bartlett Learning, LLC, 2021)	Increases LDL liver uptake by increasing the number of LDL receptors (Jones & Bartlett Learning, LLC, 2021)	Alters fluid balance in the colon, and results in accumulation of fluid and bowel movement (Valleran d et al., 2017)	Inhibits ascending pain pathways, therefore altering pain perception by binding to opioid receptors. (Jones & Bartlett Learning, LLC, 2021)
Reason Client Taking	Patient is being administered Tylenol for pain management	The patient is taking losartan for hypertension.	The patient is taking to manage hyperlipidemia	The patient is taking dulcolax for	Patient is taking this for pain management.
Contraindications (2)	1. Severe hepatic impairment 2. Hypersensitivity to acetaminophen	1. Hypersensitivity to amlodipine 2. Low blood pressure	1. Active hepatic disease 2. Rise in transaminase level (Jones & Bartlett Learning, LLC, 2021)	1. Nausea, vomiting 2. Abdominal pain	1. Respiratory depression 2. Upper airway obstruction
Side Effects/Adverse Reactions (2)	1. Severe hepatic impairment 2. hypotension	1. hypotension 2. arrythmias	1. Arrythmias 2. Rectal hemorrhag	1. Abdominal cramps 2. hypokale	1. Severe respiratory depression 2. Hypotension 3. seizures

			e	mia	
Nursing Considerations (2)	1. Monitor liver enzyme levels prior to administration of acetaminophen 2. Monitor the patient's renal function while on acetaminophen therapy (Jones & Bartlett Learning, LLC, 2021)	1. Monitor for signs of hepatic impairment 2. Monitor the patient for severely low blood pressure. The nurse should watch for tachycardia and lightheadedness (Jones & Bartlett Learning, LLC, 2021)	1. Patients with history of hepatic impairment should be monitored carefully. 2. Monitor patient's blood glucose levels (Jones & Bartlett Learning, LLC, 2021)	1. The patient's bowel status should be assessed first before administrating bisacodyl 2. Assess the stool's character (Valleran d et al., 2017)	3. Know that fentanyl is 10 times more potent than morphine 4. Fentanyl should not be used with patients who are also taking other benzodiazapines (Jones & Bartlett Learning, LLC, 2021)
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Assess the patient's pain level	Assess the patient's blood pressure	Determine trigylceride levels	Determine last bowel moevement	Assess the patient's pain level
Client Teaching Needs (2)	1. Tylenol can be crushed or be swallowed whole 2. Caution patient and family that acetaminophen can only be taken at a maximum of 4 grams.	1. Advise family and patients to routinely take blood pressure 2. Tell patients to notify providers for feelings of dizziness	1. Teach patient that atorvastatin is taken in comb	1. Bisacodyl should not be taken if constipation is exper	1. The medication should only be taken at appropriate dosages 2. Fentantyl is a high risk drug and can

	(Jones & Bartlett Learning, LLC, 2021)	(Jones & Bartlett Learning, LLC, 2021)	inatio n with other medi catio ns and lifest yle chang es. 2. Patie nt shoul d not take niaci n in conju nctio n with atorv astati n due to the risk or rhabd omyo lysis. (Jones & Bartlett Learning, LLC, 2021)	ience d with abdo minal pain 2. Enco urage other forms of bowe l regul ation (Valleran d et al., 2017)	cause dependenc e.

Medications Reference (1) (APA):

Jones & Bartlett Learning, LLC. (2021). *Nurse's drug handbook* (20th ed). Jones & Bartlett Learning, LLC.

Vallerand, A. H., Deglin, J. H., & Sanoski, C. A. (2017). *Davis's drug guide for nurses*. F.A. Davis Company.

Assessment

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

GENERAL: See notes on the right **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	The patient is alert and oriented to people, place, time, date and situation x0. Overall, the patient is neat and clean. The patient's demeanor and gait are unable to be assessed due to sedation.
INTEGUMENTARY: See notes on the right **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** 12 **Drains present: Y☒ N ☐** **Type:** JP drain on both head incisions.	The patient's skin color is black and is appropriate for race/ethnicity. The patient's skin is cool and clammy in the limbs and warm and taut in the abdomen and torso. There were no rashes, bruises or wounds noted anywhere on the body. Skin turgor is firm. Vascular puncture on right groin, surgical incisions on right and left upper parietal region are present. Old dry drainage near and around the incision sites noted.
HEENT: See notes on the right **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	The head is normocephalic and traumatic, but no active swelling or profuse bleeding noted. No drainage, cuts, or redness noted in the eyes. Ears are clean, with small amount of cerumen. Tympanic membrane unable to be visualized at this time. The patient's teeth are mostly present, but some are absent. No jugular vein distension noted. Unable to visualize the uvula and posterior oral cavity due to OG/NG drains. Oral mucosa intact.
CARDIOVASCULAR: See notes on the right **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☐ N ☒** **Location of Edema:**	Heart sounds are present. The patient is bradycardic. S1 and S2 were auscultated, as well as an S4 sounds with very faint murmur. Normal sinus bradycardia noted on the ECG with an unidentified degree of AV block, but othwerise normal rate. Capillary refill in all extremities less than 3 seconds. No edema, jugular vein distension noted. Peripheral pulses are weak +1.
RESPIRATORY: See notes on the right **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	The patient is mechanically ventilated, and respiratory rate is normal. Lung sounds are diminished in all lobes. Otherwise, no adventitious breath sounds auscultated.

GASTROINTESTINAL: See notes on the right **Diet at home:** low-sodium **Current Diet** NPO **Height:** 6'0 **Weight:** 63.8kg **Auscultation Bowel sounds:** **Last BM:** 9/5/2022 **Palpation: Pain, Mass etc.:** pain unable to be assessed at this time due to sedation **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☒ N ☐** **Size:** 60 cm length **Feeding tubes/PEG tube Y ☒ N ☐** **Type:** NG/OG	No rashes, organomegaly, distension noted. No AA auscultated. Bowel sounds are hypoactive in all quadrants. No distension, incisions, scars, drains, or wounds noted in the abdomen.
GENITOURINARY: See notes on the right **Color:** yellow **Character:** clear **Quantity of urine:** 190 mL **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☒ N ☐** **Type:** indwelling urethral catheter **Size:** 16 French	The patient's genital area does not have any cuts, bruises or rashes. No penile drainage noted. Pain with urination and frequency are unable to be assessed at this time due to sedation.
MUSCULOSKELETAL: See notes on the right **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☒ N ☐** **Fall Risk: Y ☒ N☐** **Fall Score:** 80 **Activity/Mobility Status:** **Independent (up ad lib)** ☐ **Needs assistance with equipment** ☐ **Needs support to stand and walk** ☐	The patient is currently in a coma with a Glasgow Coma Scale score of 4. The patient's active ROM cannot be assessed, and has limited passive range of motion in both arms, and full range of motion in both legs. The patient is unable to be aroused at this time. Supportive devices used are bed wedges and pillows for positioning support. Patient has general weakness and significantly impaired strength. The patient withdraws to all 4 extremities with no purposeful movement.

NEUROLOGICAL: See notes on the right **MAEW: Y ☐ N☒** **PERLA: Y ☒ N☐** **Strength Equal: Y ☐ N ☒ if no -** **Legs ☐ Arms ☒ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	The patient's speech, sensory status, and active range of motion and neurological functions are unable to be assessed at this time due to sedation. The patient's orientation, mental status and LOC are x0 at this time.
PSYCHOSOCIAL/CULTURAL: See notes on the right **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 coping methods, developmental level, religion and what it means to patient, family structure and other psychosocial and cultural history are unable to be assessed due to patient being sedated. His daughter, however, stated that the patient lives with his "wife" at home with no pets.

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
800	57 bpm, ECG	131/68 Right arm, supine, HOB at 30 degrees	16	98.8 degrees F, rectal probe	100%
1000	56 bpm, ECG	134/73 Right arm, supine, HOB at 30 degrees	21	98.6 degrees F, rectal probe	100%

Vital Sign Trends:

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
Patient is	N/A	N/A	N/A	N/A	N/A

sedated, unable to assess					
Patient is sedated, unable to assess	N/A	N/A	N/A	N/A	N/A

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: 20G **Location of IV:** anterior left forearm **Date on IV:** 9/12/2022 **Patency of IV:** patent, no difficulty flushing **Signs of erythema, drainage, etc.:** N/A **IV dressing assessment:** clean, no drainage noted	Normal saline, IV drip medications

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
Total: 676.9 mL NG/OT – 99mL Other – 90mL IV – 487.9 mL	Total: 210 mL Urine, catheter – 190mL Drains – 20 mL

Nursing Care

Summary of Care (2 points)

Overview of care: The patient is in strict I/O and needs extensive care for overall physical needs due to sedation and traumatic brain injury.

Procedures/testing done: head and shoulder CT scans, XRays, ABGs, magnesium levels, BMP, COVID PCR

Complaints/Issues: severely impaired mobility

Vital signs (stable/unstable): stable

Tolerating diet, activity, etc.: patient receiving nutrition via OG/NG tube feedings

Physician notifications: Sodium blood levels must be above 145 for therapeutic fluid shift

Future plans for client: the patient will be slowly taken off of sedation to assess for activity tolerance

Discharge Planning (2 points)

Discharge location: home

Home health needs (if applicable): fall precautions, ambulation needs, social worker follow-up

Equipment needs (if applicable): fall precautions, and ADL equipments

Follow up plan: patient will need to follow up with PCP after successful discharge

Education needs: patient must be educated on signs of subdural hematoma, and must be educated on health maintenance

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

Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components • Listed in order by priority – highest priority to	**Rationale** • Explain why the nursing diagnosis was chosen	**Interventions (2 per dx)**	**Outcome Goal (1 per dx)**	**Evaluation** • How did the client/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.

lowest priority pertinent to this client				
Decreased intracranial adaptive capacity related to primary diagnosis of subdural hematoma as evidenced by midline shift.	This diagnosis is chosen because brain function is a vital organ that is responsible for basic physiological function such as breathing, and thermoregulation.	1. The head of bed must be elevated by at least 15 to 30 degrees to help decrease and prevent increase in intracranial pressure (Phelps, 2020). 2. Assess the patient's respiratory status every 2 hours, or as ordered by the provider.	1. The patient's ICP will remain within desired limits, and no complications associated with increased ICP will be observed. 2. The patient's respiratory condition is improved or maintained within desired limits.	The patient is sedated and is currently unable to verbally and coherently respond to interventions. Goals are being met and no further action is needed at this time.
Risk for venous thromboembolism related to impaired mobility as evidenced by patient's inability to sit up or be aroused.	Pulmonary embolism is a dangerous complication that may arise from a DVT. This is a potentially life-threatening complication and should be monitored carefully.	1. Assess the patient for signs for decreased peripheral circulation such as weak peripheral pulses, warm skin, and swelling (Phelps, 2020). 2. Monitor the	1. Any signs of impaired peripheral circulation will be documented and relayed to the provider. 2. The patient's PTT and PT/INR will remain within desired limits and anticoagulation therapy will be continued.	The patient is sedated and is currently unable to verbally and coherently respond to interventions. The patient's most recent PTT, PT, INR, and D-dimer are normal. The patient's peripheral pulses are weak, and continued monitoring will

		patient's coagulation lab values such as PTT and PT/INR (Phelps, 2020).		be done.
Risk for electrolyte imbalance related to intravenous fluid therapy as evidenced by elevated sodium and chloride levels.	Electrolyte imbalance, especially potassium can have severe adverse effects on the patient's cardiac status.	1. Monitor the patient for signs of changes in fluid status such as crackles in lungs, peripheral edema, and alteration in oxygenation status. 2. Assess the patient for changes in cardiac rhythm associated with electrolyte imbalance (Phelps, 2020).	1. The patient's fluid status will not change, and the patient will remain in a hypertonic IV solution as part of fluid shift therapy. 2. The patient will not show signs of cardiac complications and his blood electrolyte levels will remain within desired limits.	The patient is sedated and is currently unable to verbally and coherently respond to interventions. ECG will be monitored, and respiration will be assessed per provider's order.
Risk for surgical site infection related to craniotomy as evidenced by surgical incision on the skull.	Surgical site infection can further compromise the patient's health. This is even more significant because the patient is critically ill and	1. The nurse and any person taking care of the patient must wash their hands before providing	1. The patient's healthcare team will perform hand hygiene whenever they provide care for the patient. 2. The patient's blood glucose	The patient is sedated and is currently unable to verbally and coherently respond to interventions. If the patient's blood sugar reaches over 200

	is highly susceptible to sepsis due to ineffective immune response.	care, and use clean gloves (Phelps, 2020). 2. Ensure that the patient's blood glucose remains below 200 mg/dL, as elevated blood sugar levels increase the risk for infection (Phelps, 2020). 3. The incision site will be continually and regularly assessed for signs of infections, such as drainage, foul smelling odor, and swelling.	levels will remain below 200 mg/dL, and blood sugar levels will be taken every 4 hours. 3. The patient's incision sites will remain free of signs of infection.	mg/dL, the appropriate insulin dosage will be administered to manage postprandial blood sugar levels.

Other References (APA):

Phelps, L.L. (2020*). Sparks and Taylor's Nursing Diagnosis Reference Manual* (11th ed.).

Wolters Kluwer

Concept Map (20 Points):

Subjective Data

The patient presented to the ED with complaint of headache and shoulder pain due to falling into his bathtub. All other subjective data are unable to be assessed at this time because patient is sedated.

Objective Data

Most current vital signs:
ECG pulse: 56
BP: 138/73
Respiration: 21
Rectal temperature: 98.6
O2 sat: 100%, room air
PT, INR, PTT, and D-dimer are all negative

Client Information

The patient is a 69-year-old African-American male. He stands at 6'0, weighing 63.8kg. He is single, unemployed, and allergic to hydralazine, penicillin, Clonidine HCl, and Nitroglycerin.

Nursing Diagnosis/Outcomes

Decreased intracranial adaptive capacity related to primary diagnosis of subdural hematoma as evidenced by midline shift.
Outcome: The patient's ICP will remain within desired limits, and no complications associated with increased ICP will be observed.
Risk for venous thromboembolism related to impaired mobility as evidenced by patient's inability to sit up or be aroused.
Outcome: The patient's PTT and PT/INR will remain within desired limits and anticoagulation therapy will be continued.
Risk for electrolyte imbalance related to intravenous fluid therapy as evidenced by elevated sodium and chloride levels.
Outcome: The patient's fluid status will not change, and the patient will remain in a hypertonic IV solution as part of fluid shift therapy.
The patient will not show signs of cardiac complications and his blood electrolyte levels will remain within desired limits.

Nursing Interventions

The head of bed must be elevated by at least 15 to 30 degrees to help decrease and prevent increase in intracranial pressure (Phelps, 2020).

Assess the patient's respiratory status every 2 hours, or as ordered by the provider.

Monitor the patient for signs of changes in fluid status such as crackles in lungs, peripheral edema, and alteration in oxygenation status.

Assess the patient for changes in cardiac rhythm associated with electrolyte imbalance (Phelps, 2020).