N441 Care Plan

Lakeview College of Nursing

Lauren Holderfield

Demographics (3 points)

Date of Admission	Patient Initials	Age	Gender
11/06/ 21	D.S.	59 years old	Female
Race/Ethnicity	Occupation	Marital Status	Allergies
Black/ African American	Unemployed	Single	None
Code Status	Height	Weight	
Full code	5 feet	112 lb and 13 oz	

Medical History (5 Points)

Past Medical History: The patient has a history of COPD.

Past Surgical History: The patient was not relatable to receive information from. The patient was on already intubated in the at home that the upon arrival to hospital information about history could not be obtained.

Family History: The patient was not relatable to receive information from. Patient's daughter was called upon arrival of OSF hospital in Urbana. The daughter was a reliable source and stated that the family had a respiratory infection

Social History (tobacco/alcohol/drugs): The patient's daughter mentioned that her mother smokes ½ cigarettes daily, drank about 7 of 4.0 oz cans of beer per week. The daughter mentioned that the patient has done drugs in the past but is currently not doing substances.

Assistive Devices: The patient is not using any assistive devices that the healthcare staff is aware of.

Living Situation: The patient lives alone in a house in Danville, IL. She recently moved to the area from Chicago mentioned by the daughter of the patient.

Education Level: The patient was unable to answer that this time due to incubation and mechanical ventilation.

Admission Assessment

Chief Complaint (2 points): Pneumonia bilaterally due to Acute Respiratory Failure

History of present Illness (10 points):

A 59-year-old black female was found unresponsive in her home by her daughter on 11/06/ 21. The daughter called 911. Upon EMS arrival, the patient showed signs of ought for three days without relief and signs of fever, chills, hypoxemia, and acute respiratory failure with pneumonia. The patient has a history of drug abuse, smoking a half pack of cigarettes daily, and alcoholism, about 7 (4.0 oz cans) per week. The patient recently moved from Chicago to Danville and currently has no PCP. Intubation was done at home, an IV started, and was sent to Sacred Heart of Mary Medical Center in Danville, IL. Upon arrival to SHMM, the patient had labs pulled such as CMP, CNP, ABG's, and a CT of the chest cavity. Upon investigation, the patient had increased creatinine and BUN, lactic acid of 2.3 mm/l, low H & H, low potassium, low CO2, low Glucose, and low albumin. These labs indicate sepsis shock, pneumonia, and acute respiratory failure because the lactic acid levels are elevated, and the ABG interpretation leads to elevated pH and declined PaCO2. Interventions started at Sacred Heart of Mary Medical Center; those interventions were RT set up a mechanical ventilator, D5W with NaCl was placed as a fluid replacement, increase the patient's glucose levels, and a foley catheter was placed for urine output. The patient was tolerating the mechanical ventilator and fluids. The patient was transported to Heart of Medical Mary in

Urbana, IL, where the healthcare team closely watched the patient's lab results. The staff at Heart of Medical Mary Center has followed up with the reporting nurse at Danville OSF. The healthcare team agrees with the interventions and will provide further care to the patient to improve the patient's outcomes. The Physician ordered a broad septum antibiotic typically used to treat pneumonia, so the MD ordered that medication.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Bilateral Pneumonia

Secondary Diagnosis (if applicable): Acute Respiratory Failure

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

Pneumonia is an inflammation in the lungs caused by bacteria, fungus, or viruses (Hinkle & Cheever, 2018). The patient has a form of pneumonia, but instead of the typical bacterium, it is caused by rhino/enteroviruses. Those risk factors are 65 years old and older, alcoholism, steroid therapy, a history of asthma, a broad-spectrum antibiotics therapy longer than seven days, Heart failure, and COPD. (Hinkle & Cheever, 2018). Usually, in upper airway prevents potential infectious particles from entering the lung cavity. Both ventilation and diffusion are affected, and inflammation occurs in the alveoli, producing exudate that interferes with oxygen and carbon dioxide diffusion. Neutrophils migrate to the alveoli and fill in the air sacs—parts of the lungs inadequately ventilated due to secretions and mucous edema.

Bronchospasm occurs, and the mixing of oxygenated and unoxygenated blood results in hypoxemia (Hinkle & Cheever, 2018). The signs and symptoms of this disease are headache and fever of 38 degrees C to 40.5 degrees C, chills, pleuritic chest pain that is relieved by coughing, and signs of respiratory distress (Capriotti, 2016). The nurse would assess the patient by using vital signs, past medical history, physical exam, chest x-ray, blood culture, and a sputum examination. Labs drawn would be for ABG's, CBC, and CMP to look at potassium and sodium electrolytes (Holman,2019). To treat this condition, one will have to start an IV site with broad-spectrum antibiotics, fluids, and other medications. Antipyretics, inhalers/ nebulizers, oxygen, and bed rest are critical interventions to improve the patient's outcomes (Hinkle & Cheever, 2018). Complications would be shocked and respiratory failure, as well as pleural effusion (Capriotti, 2016). Education would be to take rest and converse energy throughout the day. The RN would also educate the patient and family on nutrition and information about the disease and fluid intake (Holman, 2019).

Pathophysiology References (2) (APA):

Capriotti, T., (2016). *Pathophysiology: Introductory Concepts and Clinical Perspectives* Philadelphia, Pa: F.A. Davis Company.

Hinkle, J. L., Cheever, K.H. (2018). *Brunner & Suddarth's textbook of medical- surgical nursing* (14th ed.). Philadelphia, PA: Wolters Kluwer

Holman, H.C., et al. (2019). *RN Adult Medical-Surgical Nursing* (11th ed.). Assessment

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	3.8-5.1	4.36	4.27	
Hgb	12.0-16.0	10.3	9.9	A decrease in Hgb is a cause of blood vessel injury or trauma (AACC, 2019). The patient has cyanosis due to lack of gas exchange in the lungs.
Hct	35-45%	32.4	31.7	A decrease in Hct is a cause of trauma or poor oxygenation (AACC, 2019). The patient has cyanosis due to lack of gas exchange in the lungs.
Platelets	50-150 x10^9	165	85	Patient has an increase in platelets possibly due to infection in her lungs Typically an increase in platelet counts is unknown cause (Hinkle & Cheever, 2018).
WBC	4.5-11.0	8.20	20.60	Patient has an increase in platelets possibly due to infection in her bowel. Typically, an increase in platelet counts is unknown cause (Hinkle & Cheever, 2018).
Neutrophils	57-67%	26.0	28.0	The patient has infection in the lungs the neutrophils transfer to the alveoli in order to replace the fluid in the sacs which causes a decline in the levels (Hinkle & Cheever, 2018).
Lymphocytes	20-40%	30 %	70 %	Patient has an increase in platelets possibly due to infection in her bowel. Typically, an increase in platelet counts is unknown cause (Hinkle & Cheever, 2018).

Monocytes	2-8%	2	4	
Eosinophils	<3%	n/a	n/a	
Bands	3-5%	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-	135-145	141	147	Hypernatremia is due to the exchange of fluid in the lungs. The shift of fluid compromises electrolyte imbalance specially sodium (Capriotti, 2016).
K+	3.5-5.0	2.9	2.8	Hypokalemia is present due to fluid shifts in the lungs and heart. The Patient also has a nasal/ oral gastric tube in place and is experiencing PCVs in their heart rhythm. Heart dysthymias can be due to a lack of potassium (Lewis, 2018).
Cl-	97-107	111	116	The Patient also has a nasal/ oral gastric tube in place, electrolytes imbalance, and dehydration (Hinkle & Cheever, 2018).
CO2	20-29	20	19	The Patient is presenting decrease in CO2 due to the lack of gas exchange in the lungs (Holman, 2019).
Glucose	<100	30	103	Glucose is low because the patient is under stress and the body is in hypoglycemia (Holman, 2019). The

				patient needs energy.
BUN	7-20	32	21	An increase in Creatinine indicates a complication with electrolyte imbalance and/ or kidney damage (Holman, 2019).
Creatinine	0.6-1.5	1.18	0.86	A decrease in creatinine indicates a poor diet, or liver diseases (Hinkle & Cheever, 2018). An increase in Creatinine indicates a complication with electrolyte imbalance and/ or kidney damage (Holman, 2019).
Albumin	3.5-5.0	2.6	2.1	Patient has a decrease in albumin due to inflammation in the patient's abdominal cavity (AACC, 2019). This is because of the acute respiratory failure.
Calcium	8.6-10.2	9.3	8.4	Patient has a decrease due to fluid and imbalance of electrolytes because of the NG tube insertion (Hinkle and Cheever, 2018).
Mag	1.8-2.5	None	1.3	Patient has a decrease due to low dietary consumption. This is because the patient has a NG tube inserted to rest the bowel because of their SBO (Hinkle and Cheever, 2018).
Phosphate	2.5-4.5	0.7	1.7	Hypophosphatemia indicates weakness muscles can be associated with alcoholism and malnutrition (Capriotti, 2016). The patient has a history of alcoholism.
Bilirubin	0.3-1.9	0.7	0.3	

Alk Phos	33-131	125	130	
AST	<35	50	25	An increase in ALT indicates a liver disease, or damage to another organ like the heart or lungs (Hinkle & Cheever, 2018). In this case the patient has a lung infection.
ALT	<35	32	22	
Amylase	23-85	n/a	n/a	
Lipase	0-160	N/a	N/a	
Lactic Acid	0.5-1 mm/L	2.2	2.3	High lactic acid levels indicate sepsis shock (Hinkle & Cheever, 2018). The patient in in sepsis shock.
Troponin	**< 0.04 ng/ ml**	0.150	0.143	High levels of troponin indicate that there is a heart complication. Troponins are associated with MI's (Hinkle & Cheever, 2018). the patient has high troponins due to the lack of blood flow to the heart and therefore the poor oxygenation exchange between cells in the lungs.
CK-MB	5- 25 IU/L	n/a	n/a	
Total CK	22 to 198 U/ L	64	165	

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	1-2	**n/a**	**n/a**	
PT	9-12	**n/a**	**n/a**	
PTT	24-45	**n/a**	**n/a**	
D-Dimer	0-0.5	**n/a**	**n/a**	
BNP	0-100	**n/a**	**n/a**	
HDL	>50	**n/a**	**n/a**	
LDL	<130	**n/a**	**n/a**	
Cholesterol	<200	**n/a**	**n/a**	
Triglycerides	<150	**n/a**	**n/a**	
Hgb A1c	5.6-7.5	**5.7**	**N/a**	
TSH	--------	**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/	**Cloudy/**	**Yellow/**	Indicates the patient has kidney

	clear	**Amber**	**Clear**	damage, the patient is dehydrated (Holman, 2019). In this case the patient is hydrated.
pH	4.5-8.0	**5.0**	**N/a**	*Todays draws were not drawn yet
Specific Gravity	1.01-1.025	**1.015**	**N/a**	
Glucose	Negative	**Negative**	**N/a**	
Protein	0-20	**1 +**	**N/a**	
Ketones	Negative	**Negative**	**N/a**	
WBC	0-5%	**0-5**	**N/a**	
RBC	0-4%	**0-2**	**N/a**	
Leukoesterase	Negative	Negative	Negative	

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**	**7.59**	**7.57**	A high pH means that the patient is in an acidosis state (Holman, 2019). There is an excess amount of base in the blood and one's blood cannot filter it out.
PaO2	**75- 100**	**58**	**61**	A low PaO2 which means the body

				is in severe hypoxia (Holman, 2019). This correlates with the pneumonia chief complaint.
PaCO2	**35-45**	**21**	**34**	A low amount of CO2 means that the body is in alkalosis state (Holman, 2019). This makes sense because patient was diagnosed with acute respiratory failure.
HCO3	**22-26**	**N/a**	**N/a**	
SaO2	**93-97 %**	**88**	**91**	Low oxygen levels indicated low air movement in the body. Thus, stating that the patient's body is hypoxia, and they have cyanosis.

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	
Blood Culture	Negative	Detected Rhino/ enteroviruses.	Detected Rhino / enteroviruses.	A blood culture is done to find bacteria in the blood that causes infections The patient was positive for Rino virus and put on contact precautions (Hinkle & Cheever, 2018).
Sputum Culture	Negative	N/a	N/a	
Stool Culture	Negative	N/a	N/a	

Lab Correlations Reference (1) (APA):

AACC. (2019). Albumin. Retrieved from https://labtestsonline.org/tests/albumin.

Capriotti, Theresa, (2016). *Pathophysiology: Introductory Concepts and Clinical Perspectives* Philadelphia, Pa: F.A. Davis Company.

Hinkle, J. L., Cheever, K.H. (2018). *Brunner & Suddarth's textbook of medical- surgical nursing* (14th ed.). Philadelphia, PA: Wolters Kluwer

Holman, H.C., et al. (2019). *RN Adult Medical-Surgical Nursing* (11th ed.). Assessment

Lewis, J. L. (2018). Hypokalemia (Low Level of Potassium in the Blood) - Hormonal and Metabolic Disorders. Retrieved from https://www.merckmanuals.com/home/hormonal-and-metabolic-disorders/electrolyte-balance/hypokalemia-low-level-of-potassium-in-the-blood.

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

Other exams taken were CT of the chest, an MRI of the brain. A CT scan is where providers use computers and x-ray to combine to create a detailed image of what is going on in one's body (Hinkle & Cheever, 2018). The images show the parts of one's body in different shades of black and white. Typically, used to detect if a patient has pneumonia or fluid buildup in the lungs. An MRI

is a Magnetic resonance imaging technique used in radiology to form pictures of the body's anatomy and physiological processes (Holman, 2019). MRI uses a strong magnetic field and radio waves to generate images of the organs in the body to see if an organ has damage to it.

Diagnostic Test Correlation (5 points):

The CT of the chest cavity and lungs and an MRI will allow the provider to develop the best course of action to treat the patient. Without multiple resources conducted on a patient, the providers would not know what is going on in the body.

Diagnostic Test Reference (1) (APA):

Hinkle, J. L., Cheever, K.H. (2018). *Brunner & Suddarth's textbook of medical- surgical nursing* (14th ed.). Philadelphia, PA: Wolters Kluwer

Holman, H.C., et al. (2019). *RN Adult Medical-Surgical Nursing* (11th ed.). Assessment

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

Home Medications (5 required)

Brand/Generic	Promethazine (pheregan)	Hydroxyzine (Vistraril)	Clondine (Catapres)	Methadone (methadose)	(Tylenol) Acetaminophen
Dose	25	50	1 tab	1 tab	1 tab
Frequency	Q 6 hours or PRN	3 x daily	Twice a day	Daily	PRN

Route	Oral	Oral	Oral	Oral	Oral
Classification	Antihistamine	Antihistamine	Sedation and antihypertensive	Opioid analgesics	Nonopioid analgesics
Mechanism of Action	Blocks the effects of histamine.	Blocks the effects of histamine.	Stimulates alpha-adrenergic receptors in the CNS, which results in decreased sympathetic outflow inhibiting cardio acceleration and vasoconstriction centers	Alters the perception of and response to painful stimuli, while producing generalized CNS depression	Inhibits the synthesis of prostaglandins that may serve as mediators of pain and fever, primarily in the CNS
Reason Client Taking	Relief of symptoms of histamine excess usually seen in allergic conditions	relief of anxiety and tension associated with psychoneurosis	The patient has high blood pressure	Severe pain	Fever or pain
Contraindications (2)	Asthma or lower respiratory tract infection and hypersensitivity	CNS depressants and narcotics	CNS depressants and narcotics	Patient already taking hypotensive medication and history of severe asthma	Liver failure, or renal failure
Side Effects/Adverse Reactions (2)	Confusion and neuroleptic malignant syndrome	headache with chest pain, severe dizziness, and seizures	Constipation and depression	Sedation/ confusion; hypotension	Hepatotoxicity (overdose) & neutropenia

Nursing Considerations (2)	Monitor neuroleptic malignant syndrome, watch for Tardive dyskinesia	Early pregnancy term does not take, and monitor VS, CNS, and put-up seizure precautions	Be alert for signs of depression, nervousness, or other changes in mood and behavior. Assess exercise tolerance frequently (BP, HR, fatigue levels Avoid physical therapy interventions that cause systemic vasodilation	Watch for respiratory depression; and monitor pulse oximetry, EKGs, HR, BP	Therapeutic exercises to reduce pain and decrease the need for acetaminophen and other analgesics and explore other nonpharmacologic methods to reduce chronic pain, such as relaxation techniques, exercise, counseling, and so forth.
Key Nursing Assessment(s)/ Lab(s) Prior to Administration	Watch BP< VS, heart rate, EKG,	Check EKG after giving medication could cause torsade de pointes, monitor heart rate, VS	Monitor VS, HR, BP, watch labs such as sodium; and watch I/O's and daily weights	Monitor VS, HR, BP, EKGs, and CNS such as changes in mental status	Monitor VS, Labs: AST, ALT, and BUN and creatinine, and look for signs of mental status changes
Client Teaching needs (2)	Report any dizziness, or drowsiness could affect gait, monitor and report changes in mood and behavior	Report rash and any decrease in LOC, mental status changes or heart irregularity Its allergic	By mouth with or without food, twice daily at nighttime and in the morning; If the doses are not equal, take the larger dose at	caution the patient and family/caregivers to guard against falls and trauma. And report	Instruct patient and family/caregivers about the signs of liver toxicity and renal failure

		stop taking and seek PCP	bedtime to decrease the risk of side effects.	slow heart rate (bradycardia), ECG changes, or symptoms of other arrhythmias including palpitations, chest discomfort, shortness of breath, fainting, and fatigue/weakness.	Caution patient about the use of over-the-counter products that contain aspirin, other NSAIDs, or acetaminophen while taking high doses of acetaminophen.

Hospital Medications (5 required)

Brand/Generic	pantoprazole (Protonix)	Fentanyl (Transdermal)	Albumin Human 25%	Propofol (Diprivan)	Isosource 1.5 Kcal tube feeding formula
Dose	20 cc	2mcg/kg/min	12.5 g in 50 cc	35 mcg/ kg/min	run at 15kcal/ hour, 285 feeds q4 hours with

					521 cc of flush
Frequency	Once daily	Continuous for 3 hours	Once	continuous	Continuous Q 4 hours
Route	IV Push	IV	IV	IV	Nasal/Oral Tube
Classification	Antiulcer agent	Opioid agonists	globular proteins	General anesthesia	Nutrition
Mechanism of Action	Binds to an enzyme in the acidic gastric pH, preventing the final transport of hydrogen ions into the gastric lumen	Binds to opiate receptors in the CNS, altering the response to and perception of pain.	stabilizes circulating blood volume and hormones, enzymes, medicinal products and toxins	Short-acting hypnotic and Produces amnesia	Add nutrition to the patient's diet
Reason Client Taking	Decrease ulcers and GERD	Moderate-to-severe chronic pain requiring continuous opioid analgesic therapy for an extended time and the patient is on a ventilator	Albumin level is low and help with intracellular fluid placement	Sedation of intubated, mechanically ventilated patients. The patient is intubated	The patient cannot chew food because they are on a ventilator
Contraindications (2)	Should be used during pregnancy only if clearly needed,	severe asthma or breathing problem or if one has an allergy to it	Decompensated cardiac insufficiency And HTN	PROPOFOL INFUSION SYNDROME Bradycardia, and apnea	aspiration, and refeeding syndrome,

	Discontinue breast-feeding due to potential for serious adverse reactions in infants.				
Side Effects/Adverse Reactions (2)	Headache, abdominal pain	Confusion, sedation	Tachycardia, headache	Dizziness, fever	
Nursing Considerations (2)	Use PO unless patient cannot do PO the use injection of IM,	visual analogue scale for success	Medication only runed through a single line, only use tubing for four hours Holds a high risk for transmission of Creutzfeldt-Jakob disease	Watch BP, respiratory depression, and heart rate, watch EKG	Stop feeds for medications and flush before and after meds are done to make sure none are left in the tube. Monitor bowel sounds.
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Slow IV push over 2-3 minutes, DO not Crush; Patients with DM check blood glucose levels frequently, watch out for s/s pf hypoglycemia	Assess respirations, and signs of respiratory depression, assess heart rate, suspected changes in ventilation and respiratory function	clinical signs of cardiovascular overload (headache, dyspnea, jugular vein congestion), or increased blood pressure, raised venous pressure and pulmonary edema, the infusion is to be stopped immediately	Assess heart rate, ECG, and heart sounds signs of respiratory depression, including decreased respiratory rate, confusion, bluish color of the skin and mucous membranes (cyanosis)	monitor the patient for feeding tolerance. Assess the abdomen by auscultating for bowel sounds and palpating for rigidity, distention, and

			Watch hemodynamic areas	watch BP	tenderness. Make sure patient is at 30 -45 degrees for feeds to prevent aspirations
Client Teaching needs (2)	Avoid alcohol and foods that cause irritation, report prolonged diarrhea, flatulence, belching, abdominal pain	Report a prolonged or sustained increase in muscle tone. Report bradycardia or symptoms of other arrhythmias	Has low electrolyte will still need electrolyte replacement If allergic reactions occur report to nurse or PCP immediately	Monitor injection site for pain, swelling, and irritation caution the patient and family/caregivers to guard against falls and trauma.	Do not remove the tube feeding and report if there is any pain at the site of the PEG tube

Medications Reference (1) (APA):

Hinkle, J. L., Cheever, K.H. (2018). *Brunner & Suddarth's textbook of medical- surgical nursing* (14th ed.). Philadelphia, PA: Wolters Kluwer

Jones & Bartlett Learning (2019). Nurse's Drug Handbook (18th ed.). Jones & Bartlett Learning, LLC an Ascend learning company Boston, MA.

Vallerand, A. H., Sanoski, C.A., & Deglin J. H., (2015). Davis's Drug Guide for Nurses (14th ed.). F.A. Davis Company Philadelphia, PA.

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	The patient is not alert, orientated, or awake. Patient shows no immediate distress, and appearance is calm and not engaged in conversation. The patient was under sedation and on mechanical ventilator.
INTEGUMENTARY (2 points): **Skin color:** **Character:** **Temperature:** **Turgor:**	Patient's skin appears cool and dry with cyanosis; temperature is warm to the touch; skin turgor is tight, and recoil was fast. Braden score 2, which means the patient could make slight movements

Rashes: **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☐** **Type:**	in extremities or body, but not frequent or significant enough to be considered independently. No wounds visible. No Bruises. No drains.
HEENT (1 point): **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	HEENT: No PERRLA, White sclerae, conjunctivae were pink. Nose: clear, and pink mucosa membranes. Throat: mucous membranes are moist and pink. Neck: no pain when moveable, nodules palpated, nontender. Patient has own teeth with displacement or missing teeth. Ears assessment was not completed at this time.
CARDIOVASCULAR (2 points): **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:**	The patient as S1 and S2, no murmurs, or gallops. Normal sinus with PCVs. All Peripheral pulses are strong and 2+. Patient is on a cardiac monitor. Capillary refill is less than 4 seconds. No neck vein distention. No edema. No CVA tenderness. No rash. No ecchymosis. No deformities appearance. .
RESPIRATORY (2 points): **Accessory muscle use: Y☐ N ☐** **Breath Sounds: Location, character** **ET Tube:** **Size of tube:** **Placement (cm to lip):** **Respiration rate:**	No accessory muscles were used. Breathe sounds heard were diminished & crackles were heard from the lower left lobe. ET Tube was in placed; Size is 7.5 at 21cm to lip. Respiration rate was 20. FiO2 is at 35, TV 500, PEEP 10, and VAP prevention was oral care done every 2 hours.

FiO2: **Total volume (TV):** **PEEP:** **VAP prevention measures:**	
GASTROINTESTINAL (2 points): **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☐** **Nasogastric: Y ☐ N ☐** **Size:** **Feeding tubes/PEG tube Y ☐ N ☐** **Type:**	Home diet was general and in hospital it is NPO. The patient weight is 112 lb. 13 oz and height are 5 ft. Patient's bowels are hypoactive, and last BM was last night 2304 it was small, and brown. There was no pain after palpations; there were no signs of distention, incisions, scars, drains or wounds. No ostomy. The patient had a Naso-oral midline center tube for tube feeds. Size is at a 57.
GENITOURINARY (2 Points): **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☐** **Dialysis: Y ☐ N ☐** **Inspection of genitals:** **Catheter: Y ☐ N ☐**	Genitals assessed and appeared to be pink, dry, and moist. Quantity of urine was 220 cc. Urine appeared dark yellow and clear. No pain upon urination. The patient had a foley catheter placed at other facility before arrival on 11/06/21. The size is 14-16 Fr. Length of tube is 60. CAUTI prevention measures are foley/ catheter care, hand hygiene, and insertion of aseptic technique.

Type: **Size:** **CAUTI prevention measures:**	
MUSCULOSKELETAL (2 points): **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☐ N ☐** **Fall Risk: Y ☐ N☐** **Fall Score:** **Activity/Mobility Status:** **Independent (up ad lib)** ☐ **Needs assistance with equipment** ☐ **Needs support to stand and walk**☐	Patient is not oriented, alert, or awake. ROM could not be assessed at this time. The patient did not enter the facility with any supportive devices. Strength could not be assessed at this time due to patient intubated and on mechanical ventilator. Patient is on bedrest. The patient is a high fall risk. Fall score: 50.
NEUROLOGICAL (2 points): **MAEW: Y ☐ N☐** **PERLA: Y ☐ N☐** **Strength Equal: Y ☐ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	PERLA not intact. Grip strength was not detected in both legs and arms. Patient was not oriented to self, place, time, or event. Mental status could not be confirmed at this time. Speech not observed due to the intubation and mechanical ventilator. Sensory factors indicted and functional to painful stimuli. Patient cannot track objects or focus line of sight. Patients eyes open spontaneously. Glasgow coma scale: 6.
PSYCHOSOCIAL/CULTURAL (2 points): **Coping method(s):** **Developmental level:** **Religion & what it means to pt.:** **Personal/Family Data (Think about home environment, family structure, and**	Psychosocial/ cultural aspects of the patient could not be assessed at this time. The patient was under sedation and on mechanical ventilator.

available family support):	

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0730	88	79/55	20	99.3	99% On mechanical ventilator FiO2 at 35
1230	101	109/80	20	98.8	99% On mechanical ventilator FiO2 at 35

Vital Sign Trends/Correlation:

The patient's Vital Signs trend shows a decline in blood pressure at 0730. At this time, the patient was being weaned off sedation for a neurological check at 9000. The check was to see if the patient could handle sedation while also checking their neurological function. Still looking at 0730, the patient also had a slightly elevated temperature. A temperature elevation could also be due to the body's activity rate trying to start up again after coming off sedation. At this stage, the patient was moving more which could also cause an increase. At 1230, the patient was back on sedation due to increase coughing, and respiration rate increased. This nursing student also looked at the rise in blood pressure due to the activity coughing more.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0730	CPOT (Critical Care Pain Observation Tool) 0-8	Face	2/8	Face grimace	Changed patients position at this time.
1215	CPOT (Critical Care Pain Observation Tool) 0-8	Face	4/8	Face grimace, and restlessness legs	Given patient restarted Propofol and Fentanyl

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: **Location of IV:** **Date on IV:** **Patency of IV:** **Signs of erythema, drainage, etc.:** **IV dressing assessment:**	Peripheral single IV: 20-gauge, mid AC vein on right arm. Patency is intact. No signs of erythema or drainage. Placed on 11/06/21. Removed on 11/9/21. IV dressing was intact, clean, dry, and intact.
Other Lines (PICC, Port, central line, etc.)	
Type: **Size:** **Location:**	Central line: 3 lumen internal jugular vein Left, on 11/07/21 before arrival. Patency good. No signs of erythema/ drainage.

Date of insertion: **Patency:** **Signs of erythema, drainage, etc.:** **Dressing assessment:** **Date on dressing:** **CUROS caps in place: Y ☐ N ☐** **CLABSI prevention measures:**	Dressing date 11/07/21; dressing is clean, dry, and intact. Yes, CUROS in place. CLABSI: aseptic technique, hand hygiene, alcohol swap before medication administration, chlorhexidine for skin preparation.

Intake and Output (2 points)

Intake (in mL)	**Output (in mL)**
Fluids+ medications 2000 cc in shift (0700-1250) Tube feedings run at 15kcal/ hour, 285 feeds q4 hours with 521 cc of flush of NS Total: around 2570cc of fluid intake	Urine output 220 cc in shift (0700-1250) 350 cc of NG output 200 cc of mucous from suction Total: around 770 cc output

Nursing Care

Summary of Care (2 points)

Overview of care:

The night nurse gave the shift report at 0700 in SBAR format. The patient was good throughout the night—no significant complications. The patient's labs show an increase in WBC, Potassium still low, and a slight change in phosphate. Medication was not changed, and FIO2 was at 35. The patient had a slight bowel movement last night. The patient is on bed rest and with continuous tube feeds. After the report, the student nurse and RN, assessment the patient, suctioned their airway, provided oral care, and gave medications, all aspects propofol. Propofol paused due to physician orders for a neurological check during rounds. At 0900 patient opened her eyes spontaneously but did not track objects nor focus on sounds. The patient was put back on propofol because they were coughing too much. In addition, Fentanyl was added to calm and relieve the pain and shifted at 1250.

Procedures/testing done: The patient had blood drawn for CBC, CMP, CNP, Urinalysis, and a CT of the chest cavity. Later that day, a neurological consult would be done on the patient and an MRI.

Complaints/Issues: The patient had pain at 0900, and pain medication of fentanyl and propofol was given as an intervention.

Vital signs (stable/unstable): Vital signs are unstable and completed during shift. First round at 0730; pulse: 88, BP: 79/55, RR: 20, temperature: 99.3, SpO2 99% on mechanical ventilator with an FiO2 of 35. The second around as take at 1230 those were Pulse 101, BP: 109/80, RR 20, Temperature of 98.8, and SpO2 of 99% on mechanical ventilator with FiO2 of 35. Pain was taken by the CPOT scale. The patient's pain was a 2 then a 4. The patient showed pain on their face with a grimace or with restlessness legs. Intervention was done for the 4/8. The RN restarted propofol.

Tolerating diet, activity, etc.: Patient is tolerating NPO diet with tube feedings. Activity level is non-existing. Patient is on bedrest.

Physician notifications: The physician noted that the patient would continue the course of treatment and the next step is to reach out to the daughter of the patient to get consent for the MRI, then start a broad-wide antibiotic.

Future plans for patient: Plans for the patient would be for them to be weaned off the mechanical ventilator for a longer period of time than for two hours.

Discharge Planning (2 points)

Discharge location: The patient has no discharge date currently; the patient will need to show a progressively increase in neurological checks and a decrease in oxygen therapy off a ventilator and down to a nasal canal.

Home health needs (if applicable): Upon discharge, the patient will need oxygen therapy, antibiotics, and a case manager to set up a PCP. The patient does not have a PCP, so that would be the first step.

Equipment needs (if applicable): The patient will need educations of oxygen therapy.

Follow up plan: The patient will follow up with PCP in one week upon discharge from the hospital to ensure they follow an antibiotic regimen and oxygen therapy treatment plan.

Education needs: Upon discharge, the patient will need education oxygen therapy and antibiotics.

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	**Rational** • Explain why the nursing diagnosis was chosen	**Intervention (2 per dx)**	**Evaluation** • How did the patient/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Risk for infection as evidenced by high WBC count and Blood culture positive for Rhino/ enteroviruses.	This diagnosis was chosen because the patient claims to have pneumonia.	1. Aseptic technique will be used on the patient when suctioning and giving IV medications Rationale: Prevent and earlier detection of developing infectious	Response: Patient and family responded well to treatment. Labs are improving as well. Goal: To minimalize infection and promote healing.

		process. 2.Patient will be started on a broad antibiotic. Rationale: Prevent farer spread of infection.	Outcomes & Changes: Achieve timely wound healing free of infection and inflammation.
2. Impaired gas exchange related to hypoxemia as evidenced by cyanosis, Dyspnea, coughing, and abnormal ABGs.	This diagnosis was chosen because the patient has abnormal ABG's leading to Respiration Alkalosis.	1. Assess the lungs for areas of decreased ventilation and auscultate adventitious sounds Rationale: irregular breathe sounds may disclose the cause of impaired gas exchange 2.RN will monitor the patient's behavior and mental status for the onset of restlessness, confusion, and extreme lethargy. Rationale: Changes in behavior and mental status changes are early signs of impaired gas	Response: The patient and family responded well to treatment. The patient's pH is improved as well as electrolytes. Goal: Patient participates in procedures to optimize oxygenation and management regimen with the level of capability/ condition. Outcomes & Changes: Achieve optimal lung compacity and improve breathing sounds within baseline limits.

		exchange. Assess the lungs for areas of decreased ventilation and auscultate adventitious sounds	
3. Ineffective airway clearance related to Endotracheal incubation as evidenced by abnormal ABG's, abnormal breath sounds, and ineffective cough.	This diagnosis was chosen because the patient claims to have bilateral pneumonia and acute respiratory failure.	1. Monitor oxygen saturation prior to and after suction using pulse oximetry. Rationale: Assessment of oxygenation provides an adequate evaluation of the therapy. 2. Auscultate lungs for the presence of normal or adventitious breath sounds. Rationale: Diminished lung sounds, or crackles may indicate obstructed airway and need for suctioning.	Response: The patient is tolerating suctioning, and the SpO2 stat is stable. Goal: Patient will maintain clear and open airway as evidenced by normal breath sounds after suctioning. Outcomes and Changes: The patient is tolerating endotracheal tube intubation and will continue to reach clear airway clearance.
4. Imbalanced nutrition related to	This diagnosis was chosen because the	1. Refer to a dietitian for complete nutritional assessment	Response: Patient and family responded well to

sepsis, as evidenced by tube feedings, nasal-oral NG tube, and NPO diet.	patient claims to have bilateral pneumonia, acute respiratory failure, and the patient is on a mechanical ventilator.	and methods for nutritional support. Rationale: A dietitian can determine a patient's daily requirements and specific nutrients for optimal nutritional intake. 2. Provide good oral hygiene and dentition. Rationale: oral hygiene has a positive effect on appetite and prevents VAP from occurring.	treatment. The patient is tolerating nasal-oral NG tube. Goal: Adequate nutrition is vital to healing and recovery. Outcomes & Changes: The patient's oral care will need to be monitored closely and done every two hours.
5. Risk for impaired skin integrity related to Endotracheal incubation as evidenced by bedrest and decreased mobility.	This diagnosis was chosen because the patient claims to have bilateral pneumonia and is on a mechanical ventilator.	1. Encourage the implementation of a turning schedule and restrict time in one position. Rationale: Turning every two hours is key to preventing the breakdown of skin.	Response: The patient responds well to treatment. Goal: Reduce skin breakdown and limit the long duration of time spent in one position. Outcomes & Changes:

		1. Use pillows or foam wedges to keep bony prominences from direct contact with others. Rationale: Measures that reduce shearing forces on the skin.	The patient is tolerating well. The RN should be aware of the time more and keep the schedule of turnings.

Other References (APA):

Wayne, G. (2019,). *Risk for impaired skin integrity – nursing diagnosis guide*. Nurseslabs. Retrieved from https://nurseslabs.com/risk-for-impaired-skin-integrity/#nursing_interventions_for_impaired_skin_integrity.

Swearingen, P. L. (2016). *All-in-one nursing care planning resource: Medical-surgical, pediatric, maternity, psychiatric nursing care plans* (4th ed.). Elsevier/Mosby.

Concept Map (20 Points):

Subjective Data

No subjective data was collected at this time due to patient had an ET tube and was on a mechanical ventilator.

Nursing Diagnosis/Outcomes

Patient has risk for infection as evidence by high WBC count and Blood culture positive for Rhino/ enteroviruses.
Impaired gas exchange related to hypoxemia as evidence by cyanosis, Dyspnea, coughing and abnormal ABGs.
Ineffective airway clearance related to Endotracheal incubation as evidence by abnormal ABG's, abnormal breath sounds, and ineffective cough.
Imbalanced nutrition related to sepsis, as evidence by tube feedings, nasal-oral NG tube, and NPO diet.
Risk for impaired skin integrity related to Endotracheal incubation as evidence by bedrest and decrease mobility.

Objective Data

Patient has Central line: 3 lumen internal jugular Left, on 11/07/21 before arrival. Patency good. No signs of erythema/ drainage. Dressing date 11/07/21; dressing is clean, dry, and intact. Total urine output of around 770 cc output in the shift. Intake was around 2570cc of fluid intake. Last BM at 0400 was brown, and small. Pain scale was CPOT used. Vital signs are unstable and completed during shift. First round at 0730; pulse: 88, BP: 79/55, RR: 20, temperature: 99.3, SpO2 99% on mechanical ventilator with an FiO2 of 35. The second around as take at 1230 those were Pulse 101, BP: 109/80, RR 20, Temperature of 98.8, and SpO2 of 99% on mechanical ventilator with FiO2 of 35. Abnormal labs: H & H, platelets, elevated WBC, low neutrophils and lymphocytes, high Na, low K, high Cl, low CO2, low glucose, high BUN and creatinine, low albumin, low phosphate, high AST, high lactic acid, low SaO2, and abnormal ABG's that showed Repository Alkalosis.

Patient Information

D.S. admitted 11/06/2021, 59-years-oldblack female, full code, ht 5' 0" , wt 112 lb. 13 oz, No allergies. Transferred to CCU with sepsis shock, pneumonia bilateral, and acute respiratory failure. Patient was intubated. PMH: None. PSH: None. Social hx: smokes ½ pack daily, and drinks 7- 4oz cans of beer pre week. Lives alone. Patient unreliable source due to intubation. Contact daughter for information. Her contact number is in the chart.

Nursing Interventions

Aseptic technique will be used on patient when suctioning and giving IV medications. 2.Patient will be stated on a broad antibiotic. Assess the lungs for areas of decreased ventilation and auscultate adventitious sounds. Monitor patient's behavior and mental status for onset of restlessness, confusion or extreme lethargy. Monitor oxygen saturation prior to and after suction using pulse oximetry. Auscultate lungs for presence of normal or adventitious breath sounds. Refer to dietitian for complete nutritional assessment and methods for nutritional support Provide good oral hygiene and dentition. Encourage the implementation of turning schedule, and restricting time in on position. Use pillows or foam wedges to keep bony prominences from direct contact with other.