

N441 Care Plan

Lakeview College of Nursing

Macy Thilker

Demographics (3 points)

Date of Admission 02/04/2021	Patient Initials W.S.	Age 40	Gender M
Race/Ethnicity Caucasian	Occupation Disabled	Marital Status Single	Allergies NKDA
Code Status DNR	Height 177 cm	Weight 51.8 kg	

Medical History (5 Points)

Past Medical History: abnormal electrocardiogram, acute hypercapnic respiratory failure, acute hypoxemic respiratory failure, anxiety, autonomic dysreflexia, bladder stones, decubitus ulcers, depression, history of motor vehicle accident, hypoxia, recreational drug abuse, Methicillin-Resistant Staphylococcus Aureus (MRSA), chronic self-catheterization, quadriplegia (C5-C7), spasticity, Vancomycin-Resistant Enterococci (VRE), hypotension

Past Surgical History: port insertion (10/18/2020), incision and drainage of right elbow (9/11/2020), cystoscopy- stone manipulation lithotripsy (5/29/2019)

Family History: Maternal: anxiety, bipolar disorder, drug abuse

Paternal: anxiety, drug abuse

Maternal grandfather: stroke

Social History (tobacco/alcohol/drugs): patient denies tobacco and alcohol use. Patient admits to past methamphetamine use and current marijuana use but is unable to specify frequency.

Assistive Devices: Patient is mobile with power chair

Living Situation: patient lives alone at his residence

Education Level: University degree

Admission Assessment

Chief Complaint (2 points): Shortness of breath, Chills

History of present Illness (10 points): Patient reported to Sarah Bush Lincoln Health Center Emergency Department on 02/04/21 complaining of shortness of breath and chills. The patient states that the shortness of breath began one hour prior to arrival. The patient is unable to find relief and his condition deteriorated quickly in the ED. The patient has increasing confusion and a worsening respiratory status. The arterial blood gases drawn in the Emergency Department indicated respiratory acidosis. The patient was intubated by his mother's wishes. A central line was inserted, and the SIRS sepsis protocol was initiated. At this point, the patient was admitted to the Critical Care Unit.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Pneumonia

Secondary Diagnosis (if applicable): Respiratory acidosis

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

Streptococcus pneumoniae is a gram-negative bacilli bacterium that resides naturally in the respiratory tract of all people. Individuals with a weakened immune system may develop an overgrowth of this bacteria within the lungs creating the pathological disease of Pneumonia. Pneumonia is spread by contact via droplets and has many negative effects on the lungs. Symptoms include fever, chills, cough, increased respiratory rate, difficulty breathing, decreased profusion, and chest pain (CDC, 2020). A common complication of *pneumoniae* is respiratory acidosis. Respiratory acidosis occurs when the patient is unable to breathe off excess carbon dioxide. The carbon dioxide accumulates within the patient's blood stream causing a headache or confusion. Pneumonia can also lead to sepsis which includes organ failure or even death.

Pneumonia is often diagnosed via chest X-Ray and sputum culture. A chest X-Ray of a patient with pneumonia will reveal opacities within the lungs. A sputum culture will show a growth of the gram-negative streptococcus pneumoniae. Patients may also have blood tests, including a lactic acid and blood cultures to test for sepsis. Blood cultures would show bacteria within the bloodstream, and a lactic acid would be elevated. Patients will also frequently have an elevated white blood cell count. An arterial blood gas will also be used to assess the patient's acid-base balance (Capriotti and Frizzell, 2016).

This patient came to the Emergency Department reporting shortness of breath and chills. In the Emergency Department an inconclusive chest X Ray was performed, so the patient received a CTA of the chest, which revealed bibasilar pneumonia. The patient also had multiple blood tests and a sputum culture, which resulted with an elevated white blood cell count, respiratory acidosis, and growth of streptococcus pneumonia.

Treatment of pneumonia seen with this patient includes intubation to restore the acid-base balance and give the lungs rest. The patient is also receiving antibiotics and steroids to strengthen the lungs and removed the overgrowth of the bacterial infection. This is a common course of treatment for patients experience pneumonia.

Pathophysiology References (2) (APA):

Capriotti, T., & Frizzell, J. P. (2016). *Pathophysiology: Introductory concepts and clinical perspectives*. F.A. Davis Company.

CDC. (2020). *Pneumonia- an infection of the lungs*. Centers for Disease Control and Prevention. <https://www.cdc.gov/pneumonia/index.html>

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	4.28-5.56	3.74	3.25	Low red blood cell count indicated anemia and can be seen for numerous reasons including nutritional deficiency, infection resulting in bone marrow damage, or chronic inflammation (AACC, 2019).
Hgb	13.0-17.0	9.7	8.3	Low red blood cell count indicated anemia and can be seen for numerous reasons including nutritional deficiency, infection resulting in bone marrow damage, or chronic inflammation (AACC, 2019).
Hct	38.1-48.9	30.2	26.1	Low red blood cell count indicated anemia and can be seen for numerous reasons including nutritional deficiency, infection resulting in bone marrow damage, or chronic inflammation (AACC, 2019).
Platelets	149-393	200	214	
WBC	4.0-11.7	13.4	7.8	Elevated white blood cell count is seen commonly with infection and inflammation, such as pneumonia (AACC, 2021).
Neutrophils	45.3-79.0	75.5		
Lymphocytes	11.8-45.9	16.2		
Monocytes	4.4-12.0	5.9		
Eosinophils	0.0-6.3	1.9		
Bands	3%			Test not ordered

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	140	149	The patient has received multiple bags of normal saline, containing Sodium Chloride (AACC, 2017).

K+	3.5-5.1	3.3	3.1	Potassium levels can be decreased due to medications, such as Lasix (AACC, 2021).
Cl-	98-107	108	123	The patient has received multiple bags of normal saline, containing Sodium Chloride (AACC, 2017).
CO2	21-31	27	18	Can be caused by hyperventilation (AACC, 2019).
Glucose	74-109	105	95	
BUN	7-25	13	23	
Creatinine	0.70-1.30	0.37	0.64	Typically seen with low muscle mass (AACC, 2019). The patient is a quadriplegic
Albumin	3.5-5.2	3.7	2.7	Low albumin can be seen as a result of infection or inflammation (AACC, 2020).
Calcium	8.6-10.3	8.3	8.1	Low calcium may be the result of malnutrition, often from chronic illness (AACC, 2020).
Mag	1.6-2.4	1.4	1.9	Magnesium deficiency often accompanies low calcium (AACC, 2020).
Phosphate	2.5-3.0	3.0		
Bilirubin	0.3-1.0	0.3	0.3	
Alk Phos	34-104	104	57	
AST	13-39	12	7	AST levels that are low are often normal when the ALT is normal (AACC, 2020).
ALT	7-52	9	7	
Amylase				Test not ordered
Lipase				Test not ordered
Lactic Acid	0.5-2.0	1.5		
Troponin	0-0.030	0.015		

CK-MB	0.60-6.30	2.98		
Total CK	30-223	24		Chronic muscle damage can result in low CK levels (AACC, 2020).

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	0.86-1.4	1.03		
PT	11.9-15.0	13.8		
PTT	22.6-35.3	28.1		
D-Dimer				Test not ordered
BNP				Test not ordered
HDL				Test not ordered
LDL				Test not ordered
Cholesterol				Test not ordered
Triglycerides				Test not ordered
Hgb A1c				Test not ordered
TSH				Test not ordered

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	Yellow/ cloudy	Yellow/ clear	Bacteria or WBC present in the urine (AACC, 2021).
pH	5.0-8.0	6.0	6.0	
Specific Gravity	1.005-1.034	1.009	1.019	
Glucose	Low/-	normal	normal	

Protein	Low/-	trace	normal	Often an early sign of kidney disease, should be retested (AACC, 2021).
Ketones	Low/-	normal	normal	
WBC	<=5	23	2	Inflammation or infection within the urinary tract (AACC, 2021).
RBC	0-3	2	1	
Leukoesterase	Low/-	1+	neg	
UR amphetamine	Negative	Positive		The patient has used amphetamines (AACC, 2021).
UR Cannabinoid	Negative	Positive		The patient has used cannabinoids (AACC, 2021).

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	6.92	7.34	The patient's blood is acid, he is retaining CO ₂ (AACC, 2019).
PaO₂	80-90	81.3	119	The patient is hyperventilated (AACC, 2019).
PaCO₂	35-45	49	31.2	The patient had an elevated CO ₂ from respiratory depression, the CO ₂ increased from hyperventilation (AACC, 2019).
HCO₃	22-26	17.9	17.7	HCO ₃ changes are seen with kidneys attempting to compensate for respiratory failure (AACC, 2019).
SaO₂	95-98	85.2	98	The patient was not taking in enough oxygen (AACC, 2019).

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	Positive		>100,000 <i>Klebsiella oxytoca</i> >100,000 <i>Enterobacter cloacae</i> (Sarah Bush Lincoln Health Center, 2021)
Blood Culture	Negative	Negative		
Sputum Culture	Negative	Positive		Moderate <i>streptococcus pneumoniae</i> (Sarah Bush Lincoln Health Center, 2021).
Stool Culture				Test not ordered

Lab Correlations Reference (APA):

AACC. (July 2020). *Albumin*. <https://labtestsonline.org/tests/albumin>

AACC. (May 2020). *ALP, ALT, AST*. <https://labtestsonline.org/tests/alkaline-phosphatase-alp>.

AACC. (December 2019). *Bicarbonate (total CO₂)*.

<https://labtestsonline.org/tests/bicarbonate-total-co2>

AACC. (December 2019). *Blood gases*. <https://labtestsonline.org/tests/blood-gases>

AACC. (February 2020). *Calcium*. <https://labtestsonline.org/tests/calcium>

AACC. (October 2019). *Creatinine*. <https://labtestsonline.org/tests/creatinine>.

AACC. (august 2020). *Creatine kinase (CK)*. <https://labtestsonline.org/tests/creatinine-kinase-ck>

AACC. (July 2017). *Hypernatremia*. <https://labtestsonline.org/glossary/hypernatremia>

AACC. (January 2021). *Potassium*. <https://labtestsonline.org/tests/potassium>.

AACC. (March 2019). *Red blood cell count (RBC)*. <https://labtestsonline.org/tests/red-blood-cell-count-rbc>

AACC. (January 2021). *Urinalysis*. <https://labtestsonline.org/tests/urinalysis>.

AACC. (January 2021). *White blood cell count (WBC)*. <https://labtestsonline.org/tests/white-blood-cell-count-wbc>

Sarah Bush Lincoln Health Center. (2021). *Reference range (lab values)*. Mattoon, IL.

Diagnostic Imaging

All Other Diagnostic Tests (5 points): Electrocardiogram (EKG), coronary computed tomography angiogram (CTA) of the chest, X-ray of the chest, Echocardiogram (Echo)

Diagnostic Test Correlation (5 points):

EKG: ordered for patient complaint of shortness of breath. This test showed sinus rhythm with a shorted PR interval and ST elevation. These results were further investigated with the Echo and deemed non-emergent.

CTA Chest: ordered for patient complaint of shortness of breath. Results revealed no pulmonary embolism or pneumothorax, midline trachea, patent airway, normal vasculature, endotracheal (ET) tube in place 2 cm above the carina, OG tube at the stomach, stones present in left and right kidney (nonobstructive). There is a diagnostic finding of bibasilar pneumonia.

Xray Chest: Ordered for verification of ET tube placement. ET tube secure 2 cm above the carina. No pulmonary embolism or pneumothorax noted.

Echo: ordered for further investigation of ST elevation shown on EKG. No acute ST elevated Myocardial Infarction noted. 50% ejection fraction, grade 1 diastolic dysfunction, enlarged right ventricle, and mild tricuspid regurgitation noted.

Diagnostic Test Reference (APA):

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

Sarah Bush Lincoln Health Center. (2021). *Radiology reports (radiology)*. Mattoon, IL.

**Current Medications (10 points, 1 point per completed med)
*10 different medications must be completed***

Home Medications (5 required)

Brand/Generic	Proair/ albuterol	Catapres/ clonidine	Dantrium/ dantrolene	Klonopin/ clonazepam	Lioresal/ baclofen
Dose	2 puffs	0.1 mg	100 mg	1 mg	40 mg
Frequency	Every 6 hrs, PRN	qID	TID	BID	qID
Route	Inhaled	PO	PO	PO	PO
Classification	bronchodilator	antihypertensive	antispastic	Anticonvulsant/ antipanic	Skeletal muscle relaxant
Mechanism of Action	Increases ATP production and decreases calcium to relax smooth muscles (2019 Nurses drug handbook, 2019).	Stimulates transient vasoconstriction to reduce vascular resistance (2019 Nurses drug handbook, 2019).	Acts on skeletal muscles to relax muscle contractions (2019 Nurses drug handbook, 2019).	Potentiate GABA, suppressing neurotransmission of seizure activity (2019 Nurses drug handbook, 2019).	Stimulates spinal cord to relieve pain and decrease muscle spasticity (2019 Nurses drug handbook, 2019).
Reason Client Taking	Prophylactic	Hypertension	Spasticity	Spasticity	Spasticity/ chronic pain
Contraindications (2)	Hypersensitivity, hypokalemia	Anticoagulant therapy, hypotension	Active hepatic disease, rheumatic muscle disorders	Hepatic disease, hypersensitivity to benzodiazepines	Marijuana/ opiate use, hypersensitivity
Side	Anxiety,	Tremors,	Heart	Palpitations,	Drowsiness,

Effects/Adverse Reactions (2)	arrhythmia	weakness	failure, anorexia	anorexia	headache
Nursing Considerations (2)	Monitor serum potassium, drug tolerance can develop	Do not use in hemodynamically unstable patients, expect hypertension to return with discontinuation	Use cautiously in those with decreased pulmonary function, Notify provider of persistent diarrhea	Do not stop abruptly, monitor for suicidal thoughts or tendencies	Monitor for mental or mood changes, ask of patients' substance use
Key Nursing Assessment(s) Prior to Administration	Pulse, blood pressure, respiratory status, potassium levels	Blood pressure, pulse, EKG	Blood pressure, heart rate, liver function tests	CBC, hepatic functions, blood drug levels	Drug screen, H&P
Client Teaching needs (2)	Shake canister before use, Wash mouthpiece with water and air dry before use	Take medication as prescribed, inform provider of dry mouth during oral therapy	Take with food to avoid gastric upset, if missed dose, wait until next scheduled dose	Do not operate heavy machinery until the effects of the medication are known, do not consume alcohol or opiates	DO not operate vehicles until effects are known, talk to your doctor if you experience suicidal ideations

Hospital Medications (5 required)

Brand/Generic	Diprivan/propofol	Levophed/norepinephrine	Lasix/furosemide	Protoxin/pantoprazole	Solu-medrol/methylprednisolone
Dose	75 ml/hr	2 mcg/hr	40 mg	40 mg	1 mL

	Max: 85mcg/kg/min	Max: 30mcg/kg/min			
Frequency	Continuous	Continuous	BID	BID	Every 12 hrs
Route	IV drip	IV drip	IV push	IV push	IV push
Classification	Sedative/hypnotic	Vasopressor	diuretic	Proton pump inhibitor	Anti-inflammatory
Mechanism of Action	Decreases cerebral blood flow and intercranial pressure (2019 Nurses drug handbook, 2019).	Stimulated alpha-adrenergic receptors, constricting arteries and veins to increase systolic blood pressure (2019 Nurses drug handbook, 2019).	Inhibits sodium and water reabsorption in the loop of Henle to increase urination (2019 Nurses drug handbook, 2019).	Decreases functions of the proton pump to decrease the HCl in the stomach (2019 Nurses drug handbook, 2019).	Suppresses inflammatory and immune response by inhibiting monocyte accumulation (2019 Nurses drug handbook, 2019).
Reason Client Taking	Sedation	Decreased perfusion	Edema	Prophylactic	Pneumonia
Contraindications (2)	Hypersensitivity to eggs or soy, hypotension	Hypovolemia, peripheral vascular thrombosis	Anuria, hypokalemia	Rilpivirine therapy, hypersensitivity	Fungal infections, ITP
Side Effects/Adverse Reactions (2)	Bradycardia, hypotension	Angina, EKG changes	Arrhythmia, orthostatic hypotension	Chest pain, hyperglycemia	Cardiac arrest, elevation WBCs
Nursing Considerations (2)	Use cautiously in patients with cardiac disease, dispose of bag and tubing every 12 Hours to avoid bacterial growth	Ensure no medication discoloration, monitor BP every 2-3 minutes	Push slowly, 1mL/min, Obtain patient weight	Do not give within 4 weeks of H. pylori testing, ensure continuity when transitioning from IV to PO	Arrange for low-sodium diet, monitor blood glucose

Key Nursing Assessment(s) Prior to Administration	Blood pressure, heart rate, respiratory status, Glasgow coma scale	Blood pressure, EKG, heart rate	Blood pressure, potassium, sodium, daily weights, I&O, kidney function tests	Head-to-toe assessment, blood sugars, PT INR	Blood sugar, WBC, EKG, potassium, pulse, blood pressure
Client Teaching needs (2)	Urge patient to voice concerns before administration, reassure patient that they will be monitored closely when sedated	Report burning or tingling at IV site, notify provider of angina or palpitations	Change position slowly to avoid hypotension, do not drink alcohol while taking	Alert provider of palpitations or memory problems, monitor for signs of B12 deficiency	Do not stop taking abruptly, insomnia and restlessness will resolve after 3 weeks

Medications Reference (APA):

Vallerand, A. H., & Sanoski, C. A. (2019). *Davis’s drug guide for nurses*. F.A. Davis Company.
 2019 *Nurses drug handbook*. Jones & Bartlett Learning, 2019.

Assessment

Physical Exam (18 points)

GENERAL (1 point): Alertness: Orientation: Distress: Overall appearance:	the patient is sedated and intubated, opens eyes to stimuli and tracks with eyes. No acute distress currently. The patient is changed and given bed bath.
INTEGUMENTARY (2 points): Skin color: Character: Temperature:	Skin is pink, warm, and dry. Skin turgor is instantaneous. No rashes, bruises noted on left arm secondary to IV attempt. Decubitus ulcers on left and right ankle, and skin tear on left chest,

<p>Turgor: Rashes: Bruises: Wounds: Braden Score: 10 Drains present: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type:</p>	<p>midaxillary. Braden score of 10 indicates high risk for skin break down.</p>
<p>HEENT (1 point): Head/Neck: Ears: Eyes: Nose: Teeth:</p>	<p>head and neck symmetrical. Midline trachea. Pearly grey tympanic membrane noted on inspection of ears. PERRLa noted with eyes. Nose is clear, no septal deviation. Patient has scant original teeth, no dentures.</p>
<p>CARDIOVASCULAR (2 points): Heart sounds: S1, S2, S3, S4, murmur etc. Cardiac rhythm (if applicable): Peripheral Pulses: Capillary refill: Neck Vein Distention: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Edema Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Location of Edema:</p>	<p>Regular rate and rhythm noted. Patient is currently in sinus rhythm. Bilateral radial pulses of 2+, bilateral pedal pulses of 1+. Capillary refill is less than 3 seconds. Non-pitting edema seen on bilateral hands and feet Rhythm strip shows sinus rhythm HR: 80 PR interval: 0.16 QRS: 0.08 QT interval: 0.40</p>
<p>RESPIRATORY (2 points): Accessory muscle use: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Breath Sounds: Location, character ET Tube: Size of tube: 7 Placement (cm to lip): 24 cm Respiration rate: 22/min FiO2: 40% Total volume (TV): 400 PEEP: 8 VAP prevention measures:</p>	<p>Clear mechanical breath sounds in all 5 lobes of the lungs. Ventilator associated pneumonia prevented by oral care every two hours, suctioning every two hours, or as needed, and head of bed elevated 35 to 45 degrees. Hand hygiene is also used before encountering the patient.</p>
<p>GASTROINTESTINAL (2 points): Diet at home: Current Diet Height: Weight: Auscultation Bowel sounds:</p>	<p>The patient follows a regular diet at home. He currently has an OG tube and is receiving Jentyl 1.5, 80mL/hr. the patient is 177 centimeters tall and 51.8 kilograms. Hyperactive bowel sounds and all four quadrants. last bowel movement was a loose stool at 02:00 AM on 02/09/2021. the</p>

<p>Last BM: Palpation: Pain, Mass etc.: Inspection: Distention: Incisions: Scars: Drains: Wounds: Ostomy: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Nasogastric: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Size: Feeding tubes/PEG tube Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Type: OG</p>	<p>patient has no notable mass, distention, or incisions on the abdomen. Scars are present to the right upper chest, suprapubic area, and right elbow. The patient has ulcers on bilateral ankles and left upper chest, midaxillary. No drains present at this time.</p>
<p>GENITOURINARY (2 Points): Color: Character: Quantity of urine: Pain with urination: Y <input type="checkbox"/> N <input type="checkbox"/> Dialysis: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Inspection of genitals: Catheter: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Type: Coude Size: 16F CAUTI prevention measures:</p>	<p>150 mLs of yellow cloudy urine present in catheter bag at this time. The patient has no complaints of pain with urination. Genitals appear normal with no notable alterations.</p> <p>Prevention measures for a catheter associated urinary tract infection include monitoring the catheter system for blockages, catheter care every two hours, sterile insertion procedure, hand hygiene, and keeping the catheter bag below the bladder.</p>
<p>MUSCULOSKELETAL (2 points): Neurovascular status: ROM: Supportive devices: power chair Strength: ADL Assistance: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Fall Risk: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Fall Score: 50 Activity/Mobility Status: Independent (up ad lib) <input type="checkbox"/> Needs assistance with equipment <input type="checkbox"/> Needs support to stand and walk <input type="checkbox"/></p>	<p>Unable to assess neurovascular status and strength as patient is intubated and sedated. Passive range of motion preformed on all extremities. The patient is currently bed bound and requires total care.</p>
<p>NEUROLOGICAL (2 points): MAEW: Y <input type="checkbox"/> N <input type="checkbox"/> PERLA: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Strength Equal: Y <input type="checkbox"/> N <input type="checkbox"/> if no - Legs <input type="checkbox"/> Arms <input type="checkbox"/> Both <input type="checkbox"/> Orientation: Mental Status: Speech:</p>	<p>Unable to assess at this time as patient is intubated and sedated. The patient is a quadriplegic.</p>

Sensory: LOC:	
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 available family support):	Unable to assess at this time as patient is intubated and sedated. Patient is a chronic drug user but does have support from his mother.

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
08:00	76 bpm	102/56 mmHg	20/ min	37.3 C	95% c mechanical ventilation
10:15	66 bpm	107/63 mmHg	18/ min	36.9 C	97% c mechanical ventilation

Vital Sign Trends/Correlation: Vital signs are stable at this time. Norepinephrine will be titrated down and propofol will be decreased, hopefully increasing blood pressure.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions

08:00	Flacc	Unable to assess	5/10	Unable to assess	Verbal consoling, sedation
10:15	Flacc	Unable to assess	3/10	Unable to assess	Meets pain goal

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:	Not applicable
Other Lines (PICC, Port, central line, etc.)	
Type: Central line Size: unknown Location: Left intra-jugular Date of insertion: 02/04/2021 Patency: flushes without resistance Signs of erythema, drainage, etc.: none Dressing assessment: clean, dry, intact Date on dressing: 02/04/2021 CUROS caps in place: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> CLABSI prevention measures:	Current infusions of Propofol, 75 mL/hr and Norepinephrine, 2 mcg/min. Central line associated bacterial infection prevented by weekly sterile dressing changes, hand hygiene, CUROS cap in place, and antibacterial impregnated dressings.

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
350 mL	450 mL (150 urine, 300 suction via OG)

Nursing Care

Summary of Care (2 points)

Overview of care: The patient is bedfast, sedated, and intubated. Today the doctor will attempt to wean sedation to assess the patient's respiratory drive with plans of extubating if successful. The patient has no plans of leaving the Critical Care Unit today.

Procedures/testing done: Daily arterial blood gases and CBC done to assess patient improvement. An X-ray was also preformed to verify ET tube placement.

Complaints/Issues: as the sedation is wearing off, the patient is becoming more aware and agitated by the ET tube.

Vital signs (stable/unstable): stable

Tolerating diet, activity, etc.: Tolerating OG feedings and passive range of motion exercises. Attempting to refuse suctioning.

Physician notifications: Physician aware of patient's vitals signs and agitation. Will attempt to extubate.

Future plans for patient: Extubating

Discharge Planning (2 points)

Discharge location: When appropriate, the patient will discharge to his home.

Home health needs (if applicable): Following the treatment of the pneumonia, the patient will not need home health care.

Equipment needs (if applicable): The patient will continue to utilize his power chair for quadriplegia.

Follow up plan: Patient will follow up with his primary care physician for regular labs to ensure improvement after treatment of pneumonia.

Education needs: Education is required on when to seek emergency medical treatment.

The patient should be aware of the risks of shortness of breath and should seek care if these symptoms develop again. The patient may also return home with PO antibiotics and will require education on the medication.

Nursing Diagnosis (15 points)

Must be NANDA approved nursing diagnosis and listed in order of priority

<p>Nursing Diagnosis</p> <ul style="list-style-type: none"> • Include full nursing diagnosis with “related to” and “as evidenced by” components 	<p>Rational</p> <ul style="list-style-type: none"> • Explain why the nursing diagnosis was chosen 	<p>Intervention (2 per dx)</p>	<p>Evaluation</p> <ul style="list-style-type: none"> • How did the patient/family respond to the nurse’s actions? • Client response, status of goals and outcomes, modifications to plan.
<p>1. Impaired spontaneous ventilation related to respiratory failure as evidenced arterial pH less than 7.35</p>	<p>Impaired ventilation ultimately led to the patient’s decline.</p>	<p>1. EKG and chest x-ray preformed to assess patient’s lung and cardiac health</p> <p>2 arterial blood gases monitored</p>	<p>Patient compliant with plan of care and further actions needed to improve his condition. Expected outcome included spontaneous gas exchanged with decreased dyspnea after extubation and an O2 saturation of 92% or greater (Martin, 2019).</p>

<p>2. Impaired gas exchanged related to pneumonia as evidenced by elevated PaCO₂</p>	<p>The patient exhibits respiratory acidosis</p>	<p>1.Mechanical ventilation 2.Monitoring of arterial blood gases</p>	<p>The patient did not wish to be intubated, but the procedure was done by his mother's wishes. The patient's blood gases are improving with the mechanical ventilation. The expected patient outcome is a fully compensated blood pH between 7.35-7.45 (Martin, 2019).</p>
<p>3. Acute confusion related to elevated CO₂ levels as evidenced by patient comprehension below baseline</p>	<p>The patient struggled with acute confusion upon arrival to the Emergency Department</p>	<p>1. Mechanical ventilation 2.Reorientation to self, place, date, and situation</p>	<p>Patient compliant with plan of care. Expected outcome included the patient having an orientation of alert and oriented x4 (Martin, 2019).</p>
<p>4. Risk for imbalanced nutrition related to intubation as evidenced by decreased albumin, calcium, and magnesium.</p>	<p>The patient's lab work indicated malnutrition</p>	<p>1. OG tube inserted and tube feeds have begun 2. monitoring of electrolytes and blood glucose</p>	<p>The patient is compliant with the plan of care. Expected outcomes include all electrolyte levels within normal ranges, indicated adequate nutrition (Martin, 2019).</p>
<p>5. Risk for skin breakdown related to bedrest as evidenced by decubitus ulcers on bilateral ankles.</p>	<p>The patient's malnutrition and lack of movement lead to a decreased Braden score, increasing the chances of skin breakdown.</p>	<p>1. Skin check performed to ensure no new redden areas, especially boney prominences 2. Patient turned every two hours</p>	<p>The patient is compliant with the plan of care. Expected outcomes include no formation of new skin breakdown and decreasing of circumference of previous ulcers on bilateral ankles (Martin, 2019).</p>

Other References (APA):

Martin, P. (2019). *6 Mechanical ventilation nursing care plans*. Nurseslabs.

<https://nurseslabs.com/6-mechanical-ventilation-nursing-care-plans/>

Concept Map (20 Points):

Subjective Data

Patient feels short of breath
Patient does not want intubated
Patient complains of chills

Nursing Diagnosis/Outcomes

Objective Data

The patient appears short of breath with a decreased O2 sat to the emergency department
Blood pH of 6.92, PaCO2 of 149
Patient oriented to self and location
The patient has a BMI of 16.3
There are decubitus ulcers to the bilateral ankles and a wound to the right elbow

Patient Information

year-old male patient with quadriplegia from a motor vehicle accident. The patient is chronically ill and underweight with a BMI of 16.3. The patient is a chronic drug user and has overall poor health. The patient arrived to the emergency department with SOB and chills.

Nursing Interventions



