

N441 Care Plan

Lakeview College of Nursing

Matthew Catlett

**Demographics (3 points)**

|   |                                 |                                 |   |
|---|---------------------------------|---------------------------------|---|
| <b>Date of Admission</b><br>02/07/22      | <b>Client Initials</b><br>L.W.  | <b>Age</b><br>33                | <b>Gender</b><br>Male                             |
| <b>Race/Ethnicity</b><br>African American | <b>Occupation</b><br>Unemployed | <b>Marital Status</b><br>Single | <b>Allergies</b><br>Morphine, Ibuprofen,<br>Sulfa |
| <b>Code Status</b><br>Full Code           | <b>Height</b><br>5'5"           | <b>Weight</b><br>221 lbs.       |   |

**Medical History (5 Points)**

**Past Medical History:** Acute hyperkalemia, cholestatic liver disease, chronic kidney disease, Hyper-IgM syndrome, seizures, sepsis, endocarditis, benign hypertension.

**Past Surgical History:** Hernia repair, dialysis catheter insertion, gallbladder removal.

**Family History:** The client's mother had bipolar disorder and schizophrenia.

**Social History** (tobacco/alcohol/drugs including frequency, quantity, and duration of use): 0.5 PPD previous smoker for 14 years, previous alcohol use, current marijuana use (every day, at least once a day).

**Assistive Devices:** No known assistive devices.

**Living Situation:** The client currently lives at home with their significant other.

**Education Level:** The client's education status is unknown.

**Admission Assessment**

**Chief Complaint (2 points):** Lethargy, syncope, confusion, falls.

**History of Present Illness – OLD CARTS (10 points):** The client was admitted to the OSF emergency department via ambulance following multiple episodes of syncope and loss of consciousness. The client's falls began on 2/6/22 after failing to report to dialysis due to inclement weather in the area. The client's significant other states that the client's neurological status began to decline rapidly. The significant other then notified emergency services of the

client's decreased mental status. There are no relieving treatments at home that help the client's mental status. The client was admitted to the CCU if the client's respiratory status declined and needed to be placed on a ventilator. The client is also at an increased risk of declining neurovascular status related to acute encephalopathy.

### **Primary Diagnosis**

**Primary Diagnosis on Admission (2 points):** Acute Hypoxemic Respiratory Failure.

**Secondary Diagnosis (if applicable):** Acute encephalopathy, cirrhosis, endocarditis, IVC thrombosis.

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

**Acute Hypoxemic Respiratory Failure, also acute respiratory distress syndrome (ARDS), can be caused by elevated alveolar-capillary hydrostatic pressure, hypervolemia, or increased alveolar permeability. Other causes include sepsis, trauma, drug overdose, pancreatitis, acid aspiration, and pneumonia. The most common causes of Acute Hypoxemic Respiratory Failure are sepsis and pneumonia. Signs and symptoms include low oxygen saturation, crackles, jugular distension, altered mental status, confusion, cyanosis, tachypnea, and tachycardia.**

**To diagnose ARDS, a physician will obtain a chest x-ray and arterial blood gases. The chest x-ray may show infiltrates within the lungs, and the ABGs obtained will show decreased oxygen saturation and increased carbon dioxide levels, or hypercapnia.**

**The client will then be treated with oxygen to raise the oxygen saturation, which may need to be done through mechanical ventilation. The cause of the respiratory failure will need to be treated using medications, antibiotics, and oxygen therapy. If a client is**

mechanically ventilated, they will receive paralytics, such as propofol, to allow the ventilator to control the inspiration and expiration of the lungs (Patel, 2022).

Once the client's original condition is treated, the client can begin to be weaned off the mechanical ventilator, which may take hours to weeks. The goal of mechanical ventilation is to allow the patient's body to rest while the ventilator does the work, but clients who are on a ventilator should not be on it longer than necessary to reduce the risk of fibrosis and ventilator-associated pneumonia (Capriotti & Frizzell, 2016). Clients who suffer from ventilator-associated pneumonia will need to stay on a mechanical ventilator longer than necessary, which can also cost the hospital immense amounts of money.

In this client's condition, mechanical ventilation is not necessary but is not ruled out just because the client's condition has improved. Clients who experience ARDS have the possibility of suffering from respiratory failure again, and an emergency airway is a possibility for these clients.

For this client, they have received ABG testing, which showed a low amount of oxygen and a high amount of carbon dioxide. The client also received a chest x-ray, which showed the client has bilateral infiltrates present. Because this client's Acute Hypoxemic Respiratory Failure is likely caused by their hypervolemia, removing the fluid from the client's body is an important step in correcting their respiratory failure. This correction is done using hemodialysis, which removes extra fluid and waste from the blood, as the kidneys would do in a client that is not suffering from chronic kidney disease.

For client's who suffer from Acute Hypoxemic Respiratory Failure, the best way to treat the declining respiratory function is by treating the cause of the Acute Hypoxemic Respiratory Failure (Cheever & Hinkle, 2018).

**Pathophysiology References (2) (APA):**

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

Cheever, & Hinkle. (2018). *Brunner & Suddarth's Textbook of medical-surgical nursing*. Wolters Kluwer.

Patel, B. K. (2022, February 8). *Acute Hypoxemic Respiratory Failure (AHRF, ARDS) - critical care medicine*. Merck Manuals Professional Edition. Retrieved February 16, 2022, from <https://www.merckmanuals.com/professional/critical-care-medicine/respiratory-failure-and-mechanical-ventilation/acute-hypoxemic-respiratory-failure-ahrf,-ards>

**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         | 4.4-5.8      | 2.83            | N/A           | The client's low red blood cell count is caused by their chronic kidney disease (Capriotti & Frizzell, 2016).   |
| Hgb         | 13-16.5      | 7.5             | N/A           | The client's low hemoglobin is likely caused by their chronic kidney disease (Capriotti & Frizzell, 2016).  |
| Hct         | 38-50%       | 23.3%           | N/A           | The client's low hematocrit is likely caused by their chronic kidney disease (Capriotti & Frizzell, 2016).  |
| Platelets   | 140-440      | 261             | N/A           |   |
| WBC         | 4-12         | 3.5             | N/A           | While the cause of the client's low white blood cell count is unknown, it may be caused by malnutrition or vitamin deficiencies (Capriotti & Frizzell, 2016). |
| Neutrophils | 1.4-5.3      | 2.03            | N/A           |   |
| Lymphocytes | 0.9-3.3      | 0.53            | N/A           | While the cause of the client's low lymphocyte count is unknown, it may be caused by an infectious  |

|                    |                |             |            |   |
|--------------------|----------------|-------------|------------|---|
|                    |                |             |            | disease, steroid therapy, or autoimmune disorders (Capriotti & Frizzell, 2016). |
| <b>Monocytes</b>   | <b>0.1-0.9</b> | <b>0.35</b> | <b>N/A</b> |   |
| <b>Eosinophils</b> | <b>0-0.5</b>   | <b>0.4</b>  | <b>N/A</b> |   |
| <b>Bands</b>       | <b>0-10%</b>   | <b>4%</b>   | <b>N/A</b> |   |

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

| <b>Lab</b>        | <b>Normal Range</b> | <b>Admission Value</b> | <b>Today's Value</b> | <b>Reason For Abnormal</b>  |
|-------------------|---------------------|------------------------|----------------------|---|
| <b>Na-</b>        | <b>133-144</b>      | <b>140</b>             | <b>139</b>           |   |
| <b>K+</b>         | <b>3.5-5.1</b>      | <b>4.4</b>             | <b>4.4</b>           |   |
| <b>Cl-</b>        | <b>98-107</b>       | <b>98</b>              | <b>99</b>            |   |
| <b>CO2</b>        | <b>21-31</b>        | <b>30</b>              | <b>28</b>            |   |
| <b>Glucose</b>    | <b>70-99</b>        | <b>89</b>              | <b>89</b>            |   |
| <b>BUN</b>        | <b>7-25</b>         | <b>62</b>              | <b>42</b>            | The client's high BUN is caused by their poor kidney function and chronic kidney disease (Capriotti & Frizzell, 2016).                  |
| <b>Creatinine</b> | <b>0.5-1.2</b>      | <b>8.8</b>             | <b>6.8</b>           | The client's elevated creatinine is caused by their chronic kidney disease (Capriotti & Frizzell, 2016).                                |
| <b>Albumin</b>    | <b>3.5-5.7</b>      | <b>3.1</b>             | <b>3.1</b>           | The client's decreased albumin is likely caused by their cirrhosis, malnutrition, or a vitamin deficiency (Capriotti & Frizzell, 2016). |
| <b>Calcium</b>    | <b>8.6-10.3</b>     | <b>9.0</b>             | <b>8.8</b>           |   |
| <b>Mag</b>        | <b>1.6-2.6</b>      | <b>2.0</b>             | <b>N/A</b>           |   |
| <b>Phosphate</b>  | <b>34-104</b>       | <b>N/A</b>             | <b>N/A</b>           |   |
| <b>Bilirubin</b>  | <b>0.2-0.8</b>      | <b>1.3</b>             | <b>1.2</b>           | The client's high bilirubin levels  |

|                    |                |                 |              |   |
|--------------------|----------------|-----------------|--------------|---|
|                    |                |                 |              | are likely caused by their cirrhosis (Jewell, 2018)   |
| <b>Alk Phos</b>    | <b>34-104</b>  | <b>1,512</b>    | <b>1,613</b> | The client's high alkaline phosphatase is caused by their cirrhosis (Capriotti & Frizzell, 2016). |
| <b>AST</b>         | <b>13-39</b>   | <b>39</b>       | <b>33</b>    |   |
| <b>ALT</b>         | <b>7-52</b>    | <b>36</b>       | <b>32</b>    |   |
| <b>Amylase</b>     | <b>0-130</b>   | <b>N/A</b>      | <b>N/A</b>   |   |
| <b>Lipase</b>      | <b>11-82</b>   | <b>N/A</b>      | <b>N/A</b>   |   |
| <b>Lactic Acid</b> | <b>0.5-2.0</b> | <b>0.7</b>      | <b>N/A</b>   |   |
| <b>Troponin</b>    | <b>0-0.04</b>  | <b>&lt;0.03</b> | <b>N/A</b>   |   |
| <b>CK-MB</b>       | <b>0-7</b>     | <b>N/A</b>      | <b>N/A</b>   |   |
| <b>Total CK</b>    | <b>30-135</b>  | <b>N/A</b>      | <b>N/A</b>   |   |

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

| <b>Lab Test</b> | <b>Normal Range</b>  | <b>Value on Admission</b> | <b>Today's Value</b> | <b>Reason for Abnormal</b>   |
|-----------------|----------------------|---------------------------|----------------------|--|
| <b>INR</b>      | <b>0.8-1.1</b>       | <b>1.2</b>                | <b>1.4</b>           | Increased INR is caused by the client's warfarin therapy.  |
| <b>PT</b>       | <b>11-13 sec.</b>    | <b>14.4</b>               | <b>16.3</b>          | Increased PT is caused by the client's warfarin therapy.   |
| <b>PTT</b>      | <b>25-36 sec.</b>    | <b>38</b>                 | <b>127</b>           | While the PT/INR is used to measure the effectiveness of warfarin therapy, the client's PTT can still be affected by warfarin use. |
| <b>D-Dimer</b>  | <b>&lt;300 ng/mL</b> | <b>N/A</b>                | <b>N/A</b>           |  |
| <b>BNP</b>      | <b>0-100</b>         | <b>N/A</b>                | <b>N/A</b>           |  |
| <b>HDL</b>      | <b>40-59</b>         | <b>N/A</b>                | <b>N/A</b>           |  |

|                      |                |            |            |  |
|----------------------|----------------|------------|------------|--|
| <b>LDL</b>           | <b>&lt;100</b> | <b>N/A</b> | <b>N/A</b> |  |
| <b>Cholesterol</b>   | <b>&lt;200</b> | <b>N/A</b> | <b>N/A</b> |  |
| <b>Triglycerides</b> | <b>&lt;150</b> | <b>N/A</b> | <b>N/A</b> |  |
| <b>Hgb A1c</b>       | <b>&lt;7</b>   | <b>N/A</b> | <b>N/A</b> |  |
| <b>TSH</b>           | <b>0.5-5.0</b> | <b>N/A</b> | <b>N/A</b> |  |

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

| <b>Lab Test</b>            | <b>Normal Range</b>          | <b>Value on Admission</b> | <b>Today's Value</b> | <b>Reason for Abnormal</b>   |
|----------------------------|------------------------------|---------------------------|----------------------|--|
| <b>Color &amp; Clarity</b> | <b>Clear-slightly yellow</b> | <b>N/A</b>                | <b>N/A</b>           | <b>Client suffers from chronic kidney disease; the client has little to no urine output.</b> |
| <b>pH</b>                  | <b>5-9</b>                   | <b>N/A</b>                | <b>N/A</b>           |  |
| <b>Specific Gravity</b>    | <b>1.003-1.030</b>           | <b>N/A</b>                | <b>N/A</b>           |  |
| <b>Glucose</b>             | <b>Negative</b>              | <b>N/A</b>                | <b>N/A</b>           |  |
| <b>Protein</b>             | <b>Negative</b>              | <b>N/A</b>                | <b>N/A</b>           |  |
| <b>Ketones</b>             | <b>Negative</b>              | <b>N/A</b>                | <b>N/A</b>           |  |
| <b>WBC</b>                 | <b>Negative</b>              | <b>N/A</b>                | <b>N/A</b>           |  |
| <b>RBC</b>                 | <b>Negative</b>              | <b>N/A</b>                | <b>N/A</b>           |  |
| <b>Leukoesterase</b>       | <b>Negative</b>              | <b>N/A</b>                | <b>N/A</b>           |  |

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

| <b>Test</b> | <b>Normal</b> | <b>Value on</b> | <b>Today's</b> | <b>Explanation of Findings</b> |
|-------------|---------------|-----------------|----------------|--------------------------------|
|-------------|---------------|-----------------|----------------|--------------------------------|

|       | Range     | Admission | Value |   |
|-------|-----------|-----------|-------|---|
| pH    | 7.35-7.45 | 7.4       | 7.35  |   |
| PaO2  | 80-100    | 49        | 152   | The client's low PaO2 is caused by the client's hypoxia (Capriotti & Frizzell, 2016).       |
| PaCO2 | 35-45     | 52        | 53    | The client's high CO2 is caused by the client's hypoxia (Capriotti & Frizzell, 2016).       |
| HCO3  | 22-26     | 25.6      | 24.5  |   |
| SaO2  | 95-100%   | 78%       | 97%   | The client's decreased oxygen saturation is caused by hypoxia (Capriotti & Frizzell, 2016). |

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  | -            | -                  | -             |  |
| Blood Culture  | -            | +                  | +             | The client has positive finding for streptococcus agalactiae in the blood. |
| Sputum Culture | -            | -                  | -             |  |
| Stool Culture  | -            | -                  | -             |  |

**Lab Correlations Reference (1) (APA):**

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

Jewell, T. (2018, November 13). *High bilirubin levels: Symptoms and causes of elevated bilirubin*. Healthline. Retrieved February 16, 2022, from <https://www.healthline.com/health/high-bilirubin>

### **Diagnostic Imaging**

**All Other Diagnostic Tests (5 points):** To assess the client's heart function, the client has received one EKG. The client has received two EEG diagnostic tests during his stay, although more EEG tests are ordered to be completed within the following days. The client has also received a chest x-ray, as well as a CT scan of the head and abdomen.

#### **Diagnostic Test Correlation (5 points):**

EKG's can be used to determine the heart's electrical activity, and can identify heart blocks, elevations, and other dysrhythmias. This client received an EKG because of the client's endocarditis, which can show if the endocarditis is creating an arrhythmias in the hearts electrical pattern (Cheever & Hinkle, 2018).

EEG's will be used to determine electrical patterns in the brain that can be related to seizure activity and can help the provider assess the risk of further seizure activity, as well as the client's response to the gabapentin they are receiving. EEG's can also be used to find abnormalities within the electrical activity of the brain that may be caused by encephalopathy (Rayi, 2021).

The client's chest x-ray is used to verify the provider's diagnosis, as a client must have bilateral infiltrates present within the lung fields to be diagnosed with Acute Hypoxemic Respiratory Failure (Cheever & Hinkle, 2018).

The client has received an abdominal CT scan, which providers can use to determine the extent of damage caused by the cirrhosis (Cheever & Hinkle, 2018). The

client has also received a CT scan of the head, which can help determine the cause of the client’s encephalopathy (Cheever & Hinkle, 2018).

**Diagnostic Test Reference (1) (APA):**

Rayi, A. (2021, November 5). *Encephalopathic Eeg Patterns*. StatPearls [Internet]. Retrieved February 16, 2022, from <https://www.ncbi.nlm.nih.gov/books/NBK564371/>

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

**Home Medications (5 required)**

|                                |  |  |   |  |   |
|--------------------------------|--|--|---|--|---|
| <b>Brand/<br/>Generic</b>      | <b>Tylenol/<br/>Acetaminophen</b>  | <b>Coumadin/<br/>warfarin</b>  | <b>Lopressor/<br/>metoprolol</b>  | <b>Flonase/<br/>fluticasone</b>  | <b>Neurontin/<br/>Gabapentin</b>  |
| <b>Dose</b>                    | <b>500 mg</b>  | <b>5 mg</b>  | <b>10 mg</b>  | <b>50 mcg</b>  | <b>300 mg</b>   |
| <b>Frequency</b>               | <b>Q8H PRN</b>   | <b>Daily</b>   | <b>Daily</b>  | <b>Daily</b>   | <b>Daily</b>  |
| <b>Route</b>                   | <b>Oral</b>  | <b>Oral</b>  | <b>Oral</b>   | <b>Nasal</b>   | <b>Oral</b>   |
| <b>Classification</b>          | <b>Antipyretic,<br/>non-opioid<br/>analgesic</b>   | <b>Anticoagula<br/>nt</b>  | <b>Antihypert<br/>ensive</b>  | <b>Antiasthm<br/>atic/ Anti-<br/>inflammat<br/>ory</b>   | <b>Anticonvuls<br/>ant</b>  |
| <b>Mechanism of<br/>Action</b> | <b>Inhibits<br/>cyclooxygenase,<br/>which blocks<br/>prostaglandin<br/>production,<br/>interfering with<br/>pain impulses.<br/>Acetaminophen<br/>also acts</b> | <b>Interferes<br/>with the<br/>liver's<br/>ability to<br/>produce<br/>Vitamin K-<br/>dependent<br/>clotting<br/>factors.</b> | <b>Inhibits the<br/>stimulation<br/>of beta-1<br/>receptor<br/>sites.</b> | <b>Inhibits<br/>cells<br/>involved<br/>in the<br/>inflammat<br/>ory<br/>response<br/>that<br/>causes</b> | <b>GABA<br/>inhibits the<br/>rapid firing<br/>of neurons<br/>during<br/>seizures,<br/>but the<br/>exact MOA<br/>is unknown.</b> |

|   |  |  |   |   |   |
|---|--|--|---|---|---|
|   | directly on the temperature regulating center in the hypothalamus.   |  |   | asthma. This medication also inhibits the production and secretion of chemical mediators.                                   |   |
| <b>Reason Client Taking</b>               | The client is taking this medication for pain management and as needed fever reduction.  | The client is taking this medication to prevent blood clots.       | The client is taking this medication to lower his blood pressure.   | The client is taking this medication to treat allergic rhinitis.  | The client is taking this medication due to a history of seizures.            |
| <b>Contraindications (2)</b>              | Clients should not take this medication if they suffer from severe hepatic impairment or have a hypersensitivity to acetaminophen. | Contraindications include active bleeding and severe hypertension. | This should not be given to those who suffer from acute heart failure or those with a pulse less than 45 beats per minutes. | This medication should not be taken by clients with untreated nasal mucosa infection or hypersensitivity to the medication. | Contraindications include a hypersensitivity to gabapentin or its components. |
| <b>Side Effects/Adverse Reactions (2)</b> | Side effects include hepatotoxicity and hypotension.   | Side effects include hemorrhage and hypotension.                   | Side effects include heart failure and cardiogenic shock.   | Side effects include bronchospasm and adrenal insufficiency.  | Side effects include angioedema and hypoglycemia.                             |
| <b>Nursing Consideration</b>              | Use cautiously in clients with   | Avoid intramuscul  | Use cautiously  | Use cautiously  | Administer initial dose   |

|  |   |   |  |   |  |
|--|---|---|--|---|--|
| <p>s (2)</p>   | <p>hepatic impairment.<br/><br/>Monitor client for signs of nephritis, such as blood and albumin present in the urine.</p>                                      | <p>ar injections during warfarin therapy as these can lead to uncontrolled bleeding.<br/><br/>Monitor patient with hepatic impairment closely during warfarin therapy.</p>    | <p>in clients who are currently suffering from angina.<br/><br/>Patients should be monitored closely if receiving more than 400 mg in a 24-hour period.</p>                          | <p>in clients with untreated systemic infections.<br/><br/>Monitor patient closely if the patient has an allergy to milk or milk products.</p>    | <p>at bedtime to minimize adverse reactions.<br/><br/>Monitor client closely for signs of suicidal ideation.</p>                               |
| <p>Key Nursing Assessment(s) /Lab(s) Prior to Administration</p> | <p>The client's kidney and liver function studies should be evaluated prior to administration.</p>  | <p>Key nursing labs include the client's INR and PT.</p>  | <p>The client's vital signs should be checked before administration.</p>   | <p>Assess client for infections such as pulmonary tuberculosis and other infections.</p>  | <p>Important nursing assessments include blood glucose levels and blood pressure.</p>  |
| <p>Client Teaching needs (2)</p>                                 | <p>Acetaminophen should be taken as prescribed.<br/><br/>Teach the client about signs of hepatotoxicity, such as increased bleeding, bruising, and malaise.</p> | <p>Instruct client to take the drug at the exact same time every day, preferably in the evening.<br/><br/>Teach patient to use a soft bristled toothbrush and an electric</p> | <p>Instruct client to take this medication with food at the same time every day.<br/><br/>Instruct client to notify provider if their heart rate goes below 60 beats per minute.</p> | <p>Instruct client to use this medication regularly as prescribed.<br/><br/>When 2 inhalations are administered, wait 1 minute between doses.</p> | <p>Instruct client to not take antacids within 2 hours of giving this medication.<br/><br/>Instruct client to not stop this drug abruptly.</p> |

|  |  |                            |  |  |  |
|--|--|----------------------------|--|--|--|
|  |  | razor to prevent bleeding. |  |  |  |
|--|--|----------------------------|--|--|--|

**Hospital Medications (5 required)**

| <b>Brand/<br/>Generic</b>    | <b>Hydralazine</b>  | <b>Ativan/<br/>Lorazepam</b>   | <b>Cozaar/<br/>Losartan</b>  | <b>Protonix/<br/>Pantoprazole</b>                                   | <b>Zofran/<br/>Ondansetron</b>                                       |
|------------------------------|---|--|--|---|--|
| <b>Dose</b>                  | 50 mg   | 0.5 mg   | 100 mg   | 40 mg   | 4 mg   |
| <b>Frequency</b>             | 3x daily  | Q4H PRN  | Daily  | Daily   | PRN  |
| <b>Route</b>                 | Oral  | IV   | Oral   | Oral  | IV   |
| <b>Classification</b>        | Vasodilator   | Benzodiazepine   | Antihypertensive   | Proton Pump Inhibitor   | Antiemetic   |
| <b>Mechanism of Action</b>   | Interferes with calcium movement in smooth vascular muscle.         | May potentiate the effects of GABA by binding to specific receptors. | Blocks binding of angiotensin II to receptor sites.                      | Inhibits the proton pump system, inhibiting gastric secretions.     | Blocks serotonin receptors in the vagal nerve of the intestines.     |
| <b>Reason Client Taking</b>  | The client is taking this medication to manage severe hypertension. | The client is taking this medication to decrease anxiety.            | The client is taking this medication for their increased blood pressure. | The client is taking this medication to prevent esophageal erosion. | The client is taking this medication to prevent nausea and vomiting. |
| <b>Contraindications (2)</b> | Contraindications include coronary artery disease and               | Contraindications include acute angle-closure glaucoma               | Contraindications include GFR less than 60 and concurrent                | This medication should not be given to clients who have a           | Contraindications include congenital long QT syndrome                |

|  |   |  |   |   |   |
|--|---|--|---|---|---|
|  | <b>mitral valve disease.</b>  | <b>and psychosis.</b>  | <b>aliskiren therapy.</b>   | <b>hypersensitivity to pantoprazole or are currently taking midazolam.</b>  | <b>and concurrent use of apomorphine.</b>   |
| <b>Side Effects/Adverse Reactions (2)</b>                        | <b>Side effects include angina and dyspnea.</b>   | <b>Side effects include respiratory depression and agranulocytosis.</b>  | <b>Side effects include hypotension and thrombocytopenia.</b>   | <b>Side effects include pancreatitis and hypomagnesemia.</b>  | <b>Side effects include hypotension and cardiac arrhythmias.</b>  |
| <b>Nursing Considerations (2)</b>                                | <b>Give tablets with food to increase bioavailability.<br/><br/>Monitor blood pressure and pulse regularly.</b> | <b>Use cautiously in clients with a history of alcohol or drug abuse.<br/><br/>Use cautiously in clients who suffer from encephalopathy.</b> | <b>Monitor client's serum potassium levels.<br/><br/>Monitor client for muscle pain, as rhabdomyolysis can occur.</b> | <b>The client's output should be measured during therapy as this drug can cause acute interstitial nephritis.<br/><br/>This medication should not be given longer than necessary.</b> | <b>Electrolyte imbalances should be corrected before administering this medication.<br/><br/>Clients should be monitored closely for signs of serotonin syndrome, such as agitation, chills, and diaphoresis.</b> |
| <b>Key Nursing Assessment(s)/ Lab(s) Prior to Administration</b> | <b>Key assessments include vitals and CBC.</b>  | <b>The client should be assessed for depression and the client's vitals should be taken before administering this</b>                        | <b>Key assessments and labs include potassium levels and blood pressure.</b>  | <b>The client's magnesium levels should be assessed before administration of this medication.</b>   | <b>The client should be assessed for signs of hypersensitivity upon administration.<br/><br/>The client's gait and</b>  |

|                                  |  |  |   |  |  |
|----------------------------------|--|--|---|--|--|
|                                  |  | <b>medication.</b>   |   |  | <b>balance should be assessed when receiving this medication to reduce the risk of falls.</b>  |
| <b>Client Teaching needs (2)</b> | <p><b>Instruct client to take this medication with food.</b></p> <p><b>Instruct client to change positions slowly to decrease the risk of falls and lightheadedness.</b></p> | <p><b>Instruct client to take this medication exactly as prescribed.</b></p> <p><b>Instruct client to report excessive drowsiness.</b></p> | <p><b>Instruct client to avoid potassium salt substitutes.</b></p> <p><b>Avoid exercising in hot weather and drinking excessive amounts of alcohol.</b></p> | <p><b>Instruct client to notify the provider if they experience diarrhea.</b></p> <p><b>Instruct client to notify the provider if there is a large decrease in the amount of urine voided.</b></p> | <p><b>Report signs of hypersensitivity to the provider.</b></p> <p><b>Use a calibrated container when measuring oral solution.</b></p> |

**Medications Reference (1) (APA):** Jones & Bartlett Learning. (2020). *2020 Nurses drug handbook*.

Assessment

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

|   |   |
|---|---|
| <p><b>GENERAL:</b><br/> <b>Alertness:</b><br/> <b>Orientation:</b><br/> <b>Distress:</b><br/> <b>Overall appearance:</b></p>  | <p>Client alert and oriented x3.<br/> <b>Client states that he is currently in Chicago, not Danville.</b><br/> <b>Client is in mild distress.</b><br/> <b>Client's overall appearance is poor.</b></p>  |
| <p><b>INTEGUMENTARY:</b><br/> <b>Skin color:</b><br/> <b>Character:</b><br/> <b>Temperature:</b><br/> <b>Turgor:</b><br/> <b>Rashes:</b><br/> <b>Bruises:</b><br/> <b>Wounds:</b><br/> <b>Braden Score: 15</b><br/> <b>Drains present: Y <input type="checkbox"/> N <input checked="" type="checkbox"/></b><br/> <b>Type:</b></p>   | <p>Client's skin is brown, with some areas extremely dry.<br/>         Client's skin is warm to the touch in vital areas, the client's skin is cool at the ends of the extremities.<br/> <b>Client has no rashes or bruises present.</b><br/> <b>The client has one incisional wound on the abdomen.</b><br/>         The client's wrists and ankles show no signs inflammation, skin breakdown, or impaired perfusion from the restraints.</p> |
| <p><b>HEENT:</b><br/> <b>Head/Neck:</b><br/> <b>Ears:</b><br/> <b>Eyes:</b><br/> <b>Nose:</b><br/> <b>Teeth:</b></p>  | <p>Head and neck are symmetrical.<br/>         No tracheal deviation present.<br/>         Tympanic membranes are pearly gray without inflammation.<br/>         No discharge present from the ear canal.<br/> <b>Sclera's are yellow tinged.</b><br/>         Nose is midline without septal deviation.<br/>         Oral mucosa is pink and moist.<br/> <b>Some sores are present in the client's mouth.</b></p>                              |
| <p><b>CARDIOVASCULAR:</b><br/> <b>Heart sounds:</b><br/> <b>S1, S2, S3, S4, murmur etc.</b><br/> <b>Cardiac rhythm (if applicable):</b><br/> <b>Peripheral Pulses:</b><br/> <b>Capillary refill:</b><br/> <b>Neck Vein Distention: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Edema Y <input checked="" type="checkbox"/> N <input type="checkbox"/></b><br/> <b>Location of Edema:</b></p> | <p>S1 and S2 heart sounds are audible.<br/>         No S3, S4, or murmurs present.<br/>         Peripheral pulses are present in upper extremities 2+.<br/> <b>The peripheral pulses in the lower extremities are 1+.</b><br/>         Capillary refill &lt;2 seconds.<br/> <b>Mild edema present in the lower extremities.</b><br/>         The client's rhythm strip is sinus rhythm, but the client is tachycardic.</p>                      |
| <p><b>RESPIRATORY:</b></p>  | <p>Client's breath sounds are clear bilaterally in</p>  |

|   |  |
|---|--|
| <p>Accessory muscle use: Y <input type="checkbox"/> N <input type="checkbox"/></p> <p>Breath Sounds: Location, character</p> <p>ET Tube:<br/>         Size of tube:<br/>         Placement (cm to lip):<br/>         Respiration rate:<br/>         FiO2:<br/>         Total volume (TV):<br/>         PEEP:<br/>         VAP prevention measures:</p>  | <p>all lobes.<br/>         No wheezes, rhonchi, or crackles present.<br/>         No ET tube present.</p>  |
| <p><b>GASTROINTESTINAL:</b><br/>         Diet at home:<br/>         Current Diet<br/>         Height: 5'5"<br/>         Weight: 221 lbs.<br/>         Auscultation Bowel sounds:<br/>         Last BM:<br/>         Palpation: Pain, Mass etc.:<br/>         Inspection:<br/>             Distention:<br/>             Incisions:<br/>             Scars:<br/>             Drains:<br/>             Wounds:<br/>         Ostomy: Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br/>         Nasogastric: Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br/>             Size:<br/>         Feeding tubes/PEG tube Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br/>             Type:</p> | <p>Client's bowel sounds are normoactive in all four quadrants.<br/> <b>Client states that he follows no special diet at home.</b><br/>         Client is currently following a diet that is appropriate for his chronic kidney disease while in the hospital.<br/>         Last bowel movement occurred on 2/8/22.<br/> <b>Client has two scars present upon the abdomen from hernial repair surgery.</b><br/>         One of the client's scars is located above the umbilicus to the xiphoid process, approximately 6 inches long.<br/>         The other scar is located on the right side of the abdomen, approximately 6 inches lateral to the umbilicus, 4 inches long.<br/>         No signs of inflammation or infection present at the site of the scars.<br/> <b>The client is experiencing mild abdominal distention.</b><br/>         The client has no fresh incisions, wounds, or drains present.</p> |
| <p><b>GENITOURINARY:</b><br/>         Color:<br/>         Character:<br/>         Quantity of urine:<br/>         Pain with urination: Y <input type="checkbox"/> N <input type="checkbox"/><br/> <b>Dialysis: Y <input checked="" type="checkbox"/> N <input type="checkbox"/></b><br/>         Inspection of genitals:<br/>         Catheter: Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br/>             Type:<br/>             Size:<br/>         CAUTI prevention measures:</p>  | <p><b>The client has little to no urinary output due to advanced kidney disease.</b><br/>         Th client's genitals are intact without sores or inflammation present.</p>   |
| <p><b>MUSCULOSKELETAL:</b></p>  | <p><b>The client is bedfast due to altered mental</b></p>  |

|   |  |
|---|--|
| <p>Neurovascular status:<br/>                 ROM:<br/>                 Supportive devices:<br/>                 Strength:<br/>                 ADL Assistance: Y <input checked="" type="checkbox"/> N <input type="checkbox"/><br/>                 Fall Risk: Y <input checked="" type="checkbox"/> N <input type="checkbox"/><br/>                 Fall Score: 95 per Morse Fall Scale<br/>                 Activity/Mobility Status:<br/>                 Independent (up ad lib) <input type="checkbox"/><br/>                 Needs assistance with equipment <input type="checkbox"/><br/>                 Needs support to stand and walk <input type="checkbox"/></p> | <p><b>status and is currently restrained x4.</b><br/>                 The client has full range of motion in all extremities.<br/>                 The client has equal strength in all extremities.</p>   |
| <p>NEUROLOGICAL:<br/>                 MAEW: Y <input checked="" type="checkbox"/> N <input type="checkbox"/><br/>                 PERLA: Y <input checked="" type="checkbox"/> N <input type="checkbox"/><br/>                 Strength Equal: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> if no - Legs<br/> <input type="checkbox"/> Arms <input type="checkbox"/> Both <input type="checkbox"/><br/>                 Orientation:<br/>                 Mental Status:<br/>                 Speech:<br/>                 Sensory:<br/>                 LOC:</p>   | <p><b>The client is alert and oriented to person, time, date. The client believes that he is in Chicago, not Danville.</b><br/> <b>The client's speech is mildly impaired and becomes confused easily about tasks being performed and the nursing staff caring for him.</b><br/>                 The client can maintain consciousness when spoken to.</p> |
| <p>PSYCHOSOCIAL/CULTURAL:<br/>                 Coping method(s):<br/>                 Developmental level:<br/>                 Religion &amp; what it means to pt.:<br/>                 Personal/Family Data (Think about home environment, family structure, and available family support):</p>  | <p>The client states that he does not follow any religion.<br/> <b>The client's developmental level appears slightly delayed.</b><br/>                 The client receives support from his significant other.</p>   |

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

| Time | Pulse      | B/P            | Resp Rate | Temp | Oxygen              |
|------|------------|----------------|-----------|------|---------------------|
| 0600 | <b>111</b> | <b>136/93</b>  | 17        | 98.6 | 98% (3L/NC)         |
| 0800 | <b>97</b>  | <b>153/104</b> | 14        | 97.7 | 100%<br><br>(3L/NC) |

Vital Sign Trends/Correlation:

The client's respirations, temperature, and oxygen saturation have remained stable throughout the clinical day, although the client's pulse and blood pressure are concerning and seem to elevate and decrease randomly throughout the day. The client's high blood pressure may be an expected finding in this client, as they have a past medical history that includes benign hypertension, but their hypertension at this time may also be related to retaining fluids from chronic kidney disease. The client's high pulse may be related to stress, a side effect of the many medications the client is taking, or from alcohol withdrawal.

**Pain Assessment, 2 sets (2 points)**

| <b>Time</b> | <b>Scale</b>   | <b>Location</b>            | <b>Severity</b> | <b>Characteristics</b> | <b>Interventions</b> |
|-------------|----------------|----------------------------|-----------------|------------------------|----------------------|
| <b>0800</b> | <b>Numeric</b> | <b>Chest &amp; abdomen</b> | <b>0</b>        | <b>N/A</b>             | <b>N/A</b>           |
| <b>1000</b> | <b>Numeric</b> | <b>Chest &amp; abdomen</b> | <b>0</b>        | <b>N/A</b>             | <b>N/A</b>           |

**IV Assessment (2 Points)**

| <b>IV Assessment</b>   | <b>Fluid Type/Rate or Saline Lock</b>   |
|--|---|
| <b>Size of IV: 20 gauge</b><br><b>Location of IV: Right median cubital</b><br><b>Date on IV: 2/07/22</b><br><b>Patency of IV: IV is intact and flushes well.</b><br><b>Signs of erythema, drainage, etc.: N/A</b><br><b>IV dressing assessment: IV dressing looks fresh with no signs of saturation.</b> | The client is currently discontinued from receiving any medications, include 0.9% normal saline, through the IV site.                 |
| <b>Other Lines (PICC, Port, central line, etc.)</b>  | N/A   |
| <b>Type: Trialysis catheter</b><br><b>Size: 13 French</b><br><b>Location: Right Jugular Vein</b>   | The client's Trialysis catheter flushes well, and there are no signs of inflammation, infection, or drainage present at the insertion |

|  |  |
|--|--|
| <b>Date of insertion: 2/8/22</b><br><b>Patency:</b><br><b>Signs of erythema, drainage, etc.:</b><br><b>Dressing assessment:</b><br><b>Date on dressing:</b><br><b>CUROS caps in place: Y <input type="checkbox"/> N <input type="checkbox"/></b><br><b>CLABSI prevention measures:</b> | site.<br><br>The client's dressing is intact and was placed on 2/8/22. |
|--|--|

**Intake and Output (2 points)**

| <b>Intake (in mL)</b>   | <b>Output (in mL)</b>         |
|---|-------------------------------|
| <b>0 mL (The client has refused any drink since being admitted and has not received any normal saline.)</b><br><br><b>The client has previously refused all meals but did consume 50% of his breakfast on the day of clinical (Approximately one egg, and one strip of turkey bacon.)</b> | <b>4000 mL (per dialysis)</b> |

**Nursing Care**

**Summary of Care (2 points)**

**Overview of care: The client is provided help with their meal, as well as suctioning their oral secretions throughout the day.**

**Procedures/testing done: The client received an EEG.**

**Complaints/Issues: The client complains of poor treatment by the nursing staff and the food being unwanted.**

**Vital signs (stable/unstable):** The client's vital signs remained stable throughout the day, other than the client's pulse and blood pressure which remain high.

**Tolerating diet, activity, etc.:** The client is not tolerating being restrained and bedfast.

**Physician notifications:** No physician notifications currently.

**Future plans for client:** Future plans for the client are currently unknown.

#### **Discharge Planning (2 points)**

**Discharge location:** The client may be discharged home, although the client's significant other believes that the client needs to be placed in a facility that can help with the client's care needs.

**Home health needs (if applicable):** No home health needs currently.

**Equipment needs (if applicable):** No equipment needs currently.

**Follow up plan:** Because the client's discharge date and location are unknown currently, the only follow up plan in place is to have case management speak to the significant other regarding treatment options outside of the hospital.

**Education needs:** The client should receive education regarding their diet as their kidney function is extremely limited.

**Nursing Diagnosis (15 points)**

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

| <p><b>Nursing Diagnosis</b></p> <ul style="list-style-type: none"> <li>• Include full nursing diagnosis with "related to" and "as evidenced by" components</li> <li>• Listed in order by priority – highest priority to lowest priority pertinent to this client</li> </ul> | <p><b>Rationale</b></p> <ul style="list-style-type: none"> <li>• Explain why the nursing diagnosis was chosen</li> </ul> | <p><b>Interventions (2 per dx)</b></p>  | <p><b>Outcome Goal (1 per dx)</b></p>  | <p><b>Evaluation</b></p> <ul style="list-style-type: none"> <li>• How did the client/family respond to the nurse's actions?</li> <li>• Client response, status of goals and outcomes, modifications to plan.</li> </ul> |
|---|--|---|--|---|
| <p><b>1. Disruption of Gas Exchange related to Acute Hypoxemic Respiratory Failure as evidenced by the client's decreased oxygen saturation upon admission.</b></p>   | <p><b>The client is unable to exchange gases necessary for life due to respiratory failure.</b></p>                      | <p><b>1. Interventions include placing the client on oxygen.</b></p> <p><b>2. The client's respiratory effort is assessed closely and frequently in the emergency that the client is unable to breathe spontaneously.</b></p> | <p><b>1. Increased oxygen saturation and decreased respiratory effort.</b></p> | <p><b>The client has no longer choked or coughed due to excessive oral secretions.</b></p>  |
| <p><b>2. Risk of Aspiration related to oral secretions as evidenced by</b></p>  | <p><b>The client's level of consciousness varies which places</b></p>  | <p><b>1. The client is suctioned in regular intervals to reduce the risk of aspiration.</b></p>   | <p><b>1. The client will not aspirate on their</b></p>                         | <p><b>The client has no longer choked or coughed due to excessive oral</b></p>  |

|  |  |   |   |  |
|--|--|---|---|--|
| <p><b>client's altered mental status and excessive drooling.</b></p>   | <p><b>the client at risk for aspiration.</b></p>   | <p><b>2. The head of the bed is raised to at least 45 degrees to reduce the risk of aspiration.</b></p>   | <p><b>secretions</b></p>  | <p><b>secretions.</b></p>  |
| <p><b>3. Altered Urinary Elimination related to Chronic Kidney Disease as evidenced by BUN and creatinine levels.</b></p>              | <p><b>The client's chronic kidney disease has made the client unable to eliminate urine, forcing the client to use hemodialysis to rid the body of excess electrolytes, waste, and fluids.</b></p> | <p><b>1. The client will receive dialysis to normalize excess fluid and remove waste from the body.</b></p> <p><b>2. The client will be placed on an appropriate diet to reduce the risk of proteins and sugars building up in the bloodstream.</b></p> | <p><b>1 The client will lose weight from fluid being pulled out of the body and the client's mental status will become normal</b></p> | <p><b>The client's mental status is returning to normal, and the client lost 4000 mL of fluid.</b></p> |
| <p><b>3. Impaired Verbal Communication related to altered mental status as evidenced by client's slurred speech and confusion.</b></p> | <p><b>The client speaks unclearly at moments and the client's speech is dissociative.</b></p>  | <p><b>1. Speak slowly to the client and allow the client time to understand what is being asked of them.</b></p> <p><b>2. Allow the client time to generate thoughts about their feelings, wants, and wishes.</b></p>                                   | <p><b>1. The client's behavior improves when given time to generate thoughts.</b></p>   | <p><b>The client's behavior did improve.</b></p>   |
| <p><b>4. Risk of Harm</b></p>  | <p><b>The client</b></p>   | <p><b>1. Use least</b></p>  | <p><b>1. The</b></p>  | <p><b>The client did</b></p>   |

|   |   |   |  |   |
|---|---|---|--|---|
| <p><b>related to altered mental status as evidenced by client's aggressive behavior towards self and nursing staff.</b></p> | <p><b>has shown signs of aggression towards the nurses and creates a danger to himself by not allowing the nurses to perform their job appropriately, which causes them to not give the care needed for the client's condition.</b></p> | <p><b>restrictive measures to avoid the risk of harm.</b></p> <p><b>2. If necessary, place the client in restraints per provider's orders and perform hourly assessments.</b></p> | <p><b>client will not need to be restrained.</b></p> | <p><b>need to be restrained due to potential harm to self and others.</b></p> |
|---|---|---|--|---|

**Other References (APA):** Cheever, & Hinkle. (2018). *Brunner & Suddarth's Textbook of medical-surgical nursing*. Wolters Kluwer.

**Concept Map (20 Points):**

**Subjective Data**

The client can be combative and resist help, as well as turn away food and beverages. The client is suffering from altered mental status and suffers from chronic kidney disease.

**Nursing Diagnosis/Outcomes**

Disruption of gas exchange related to acute hypoxemic respiratory failure as evidenced by the client's decreased oxygen saturation upon admission.  
 Increased oxygen saturation and decreased respirator effort.

Altered urinary elimination related to chronic kidney disease as evidenced by BUN and creatinine levels.  
 - The client will lose weight from fluid being pulled out of the body and the client's mental status will become normal.

Risk of aspiration related to oral secretions as evidenced by client's altered mental status and excessive drooling.  
 -The client will not aspirate on their secretions.

Impaired verbal communication related to altered mental status as evidenced by client's slurred speech and confusion.  
 The client's behavior did improve.

Risk of harm related to altered mental status as evidenced by client's aggressive behavior towards self and nursing staff.  
 The client did need to be restrained due to potential harm to self and others.

**Objective Data**

Pulse: 97  
 Temp: 97.7  
 Blood Pressure: 153/104  
 O2 Saturation: 100%  
 Increased creatinine and BUN

**Client Information**

L.W. is a 33-year-old African American male suffering from acute hypoxemic respiratory failure.

**Nursing Interventions**

Interventions include placing the client on oxygen.

The client's respiratory effort is assessed closely and frequently in the emergency that the client is unable to breathe spontaneously.

The client will receive dialysis to normalize excess fluid and remove waste from the body.

The client will be placed on an appropriate diet to reduce the risk of proteins and sugars building up in the bloodstream.  
 The client is suctioned in regular intervals to reduce the risk of aspiration.

2. The head of the bed is raised to at least 45 degrees to reduce the risk of aspiration.  
 Speak slowly to the client and allow the client time to understand what is being asked of them.

2. Allow the client time to generate thoughts about their feelings, wants, and wishes.  
 Use least restrictive measures to avoid the risk of harm.

2. If necessary, place the client in restraints per provider's orders and perform hourly assessments.





