N431 Care Plan # 1

Lakeview College of Nursing

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Demographics (3 points)

Date of Admission 2/19/2023	**Client Initials** JR	**Age** 48	**Gender** male
Race/Ethnicity African American	**Occupation** Alphia care – part-time	**Marital Status** single	**Allergies** None
Code Status Full	**Height** 1.778 m (5’10”)	**Weight** 112.5 kg (245 lbs 1.6 oz)	

Medical History (5 Points)

Past Medical History: This patient has no past medical history listed in the chart. The patient confirmed he has no past medical history.

Past Surgical History: This patient has no past surgical history listed in the chart. The patient confirmed he has no past surgical history.

Family History: The patient’s father, passed away at the age of 63 from oral cancer. The patient’s father had no other existing conditions. The patient’s mother, who is still living, has a history of hypertension, but no other medical conditions. The patient is unsure if his grandparents had any medical conditions on both the maternal and paternal side.

Social History (tobacco/alcohol/drugs including frequency, quantity and duration of use): The patient denies the use of any tobacco, alcohol, drugs, smoking, or vaping.

Assistive Devices: The patient denies the use of any assisted devices, including glasses.

Living Situation: The patient lives in a apartment complex with one other roommate. The patient does not own any pets.

Education Level:

The patient obtained a high school diploma from Urbana high school in 1993.

Admission Assessment

Chief Complaint (2 points): Spasming pain in the left side of the chest

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

The patient is a 48-year-old male without a significant past medical history presenting with left chest pain that worsens with breathing and coughing. The patient described the chest pain as a spasming feeling. The patient also reports the cough started 1 week prior. The patient was tested for covid when the cough began, which concluded with negative results. Following the covid test, the patient began to experience palpations. The patient was worried about the palpations, so he went to the emergency department. Upon arrival at the emergency department, the patient was tachycardic. The ED ran a D-dimer, which resulted in positive results, so a CT PE (computed tomography for pulmonary embolism) was performed. In this CT PE the patient showed a presence of a bilateral pulmonary embolism, so heart strain became a concern. Troponin levels were also tested, and the results were negative. The patient did not require oxygen. The patient was started on a heparin drip and was admitted to the hospital for further monitoring.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Bilateral pulmonary embolism

Secondary Diagnosis (if applicable): Chest pain due to unknown etiology

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

What a pulmonary embolism is:

A pulmonary embolism is a pulmonary artery blockage in one or more lung branches (Capriotti, 2020). Since the primary diagnosis was a bilateral pulmonary embolism, the patient

has a pulmonary embolism in both lungs. The blockage usually results from foreign fluid originating from another body part, such as blood clots, fat, or air.

Signs and symptoms of a pulmonary embolism:

Some signs and symptoms that this patient experienced that are expected from a pulmonary embolism include “chest pain, a cough, and palpitations” (Swearingen & Wright, 2019, p. 136). Although this patient experienced some of the symptoms of a PE, other symptoms for someone diagnosed with a pulmonary embolism include hemoptysis, restlessness, anxiety, nausea, cyanosis, and syncope.

Risk factors of a pulmonary embolism:

Some risk factors for pulmonary embolism include immobility, atrial fibrillation, heart failure, myocardial infarction, hypertension, coronary artery disease, musculoskeletal injuries, chronic pulmonary and infectious disease, trauma especially to the lower extremities, obesity, and smoking (Capriotti, 2020). This patient is considered obese with a BMI of above 30, putting him at risk for a PE; however, since this patient does not have any significant medical history or smokes, this can help prevent a pulmonary embolism from occurring.

Diagnostic testing of a pulmonary embolism:

Diagnostic testing for a pulmonary embolism includes arterial blood gases, brain natriuretic peptide (BNP), D-dimer, ECG, Computed technology (CT), pulmonary ventilation-perfusion scan, pulmonary angiography, and chest radiology (Capriotti, 2020). Upon admission, the hospital performed an ABG, a D-dimer, CT PE, and a chest X-ray on the patient. A BNP was not performed. Upon assessment of the findings of the ABG, the PaO2 was less than 80 mm HG, the PaCO2 was less than 35, and the pH was more than 7.45. The patient also presented with high D-

dimer levels, and no grossly evident acute cardiopulmonary pathophysiology was seen on the chest x-ray. The CT PE results were still pending at the time of discharge.

Nursing interventions for a pulmonary embolism:

Nursing interventions for someone with a PE would include teaching the use of a newer oral anticoagulant, encouraging ambulation and motor activity, assessing the patient's respiratory rate, assessing vital signs for bleeding at least once a shift, monitoring serum prothrombin time (PT), and caution the patient about using a soft-bristled toothbrush rather than a hard-bristle brush and caution about using a razor, as the patient is more likely at risk to bleed (Swearingen & Wright, 2019). All these nursing interventions can be applied to this patient since he was put on a heparin drip, which increases bleeding, ambulation assists with the lack of forming clots, and this patient would need to be taught how to use his new oral anticoagulant since he was prescribed to take apixaban (Eliquis) at home.

Treatment of a pulmonary embolism:

Treatment for pulmonary embolism could include treatment with prophylaxis, anticoagulants (warfarin, rivaroxaban, apixaban, and edoxaban), ambulation, and deep breathing and coughing exercises (Swearingen & Wright, 2019). This patient was prescribed apixaban to assist in treating his PE. He will continue to take this medication for six months post-discharge.

Pathophysiology References (2) (APA):

Capriotti, T. M. (2020). *PATHOPHYSIOLOGY: introductory concepts and clinical perspectives.* (2nd ed., pp. 1154–1164). F A Davis.

Swearingen, P. L., & Wright, J. D. (2019). *All-in-one nursing care planning resource medical-surgical, pediatric, maternity, and Psychiatric-Mental Health*. Elsevier.

Laboratory Data (15 points)

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

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal Value
RBC	4.10-5.70 10^6/uL	4.60	N/A	
Hgb	12.0 – 18.0 g/dL	13.5	N/A	
Hct	37.0-51.0 %	41.4	N/A	
Platelets	140-400 10^3/uL	163	N/A	
WBC	4.00-11.00 10^3u/L	9.24	N/A	
Neutrophils	1.60 – 7.70 10^3/uL	6.60	N/A	
Lymphocytes	1.00-4.90 10^3/uL	2.22	N/A	
Monocytes	0.0 – 1.10 10^3/uL	0.89	N/A	
Eosinophils	0.01-0.20 10^3/uL	0.02	N/A	Although this lab is still technically within the normal range, a nurse should monitor this level. Higher levels of eosinophil can be a result of inflammation and edema from the pulmonary embolism.
Bands	0.0 – 0.09 10^3/uL	N/A	N/A	

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

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal
Na-	136 – 145 mmol/L	136	N/A	Although this lab is still technically within the normal range, a nurse should monitor this level. Low sodium levels can be caused by diuretic use, diarrhea, and adrenal insufficiency. These low levels could also be due to the mild edema of the lower extremities.

K+	3.5 – 5.1 mmol/L	4.4	N/A	
Cl-	98-107 Mmol/L	101	N/A	
CO2	22.0 – 29.0 mmol/L	25.0	N/A	
Glucose	74 – 100 mg/dL	103	N/A	The glucose levels in this patient could be higher than normal due to the stress of fighting an infection has on the body. This level could also be high as a side effect of taking melatonin to help sleep.
BUN	8-26 mg/dL	12	N/A	
Creatinine	0.55 – 1.30 mg/dL	1.23	N/A	
Albumin	3.5-5.2 gm/dL	3.8	N/A	
Calcium	8.9 – 10.6 mg/dL	9.4	N/A	
Mag	1.6-2.6 mg/dL	N/A	N/A	
Phosphate	2.5-4.5 mg/dL	N/A	N/A	
Bilirubin	0.2 – 1.2 mg/dL	0.5	N/A	
Alk Phos	40-150 U/L	47	N/A	
AST	5-34 U/L	24	N/A	
ALT	0-55 U/L	37	N/A	
Amylase	30 - 110 U/L	N/A	N/A	
Lipase	0-160 U/L	N/A	N/A	
Lactic Acid	0.5 to 2.2 Mmol/L	N/A	N/A	
Troponin	0-4 ng/L	3	N/A	
CK-MB	N/A	N/A	N/A	

Total CK	N/A	N/A	N/A	

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

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
INR	0.9 -1.1 ration	1.1	N/A	Although this lab is still technically within the normal range, a nurse should monitor this level. Increased INR levels signifies that the blood takes a longer time to clot.
PT	11.7-13.8 seconds	13.5	N/A	
PTT	22.4-35.9 seconds	25.6	N/A	
D-Dimer	< 0.50 ug/mL	3.07	N/A	A high D-dimer level indicates that there is a clot present in the body.
BNP	<300 pg/mL	N/A	N/A	
HDL	40-60 mg/dL	N/A	N/A	
LDL	<100 mg/dL	N/A	N/A	
Cholesterol	0-200 mg/dL	N/A	N/A	
Triglycerides	<150 mg/dL	N/A	N/A	
Hgb A1c	4.0-7.0%	N/A	N/A	
TSH	0.34 -5.00 mcLU/mL	N/A	N/A	

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

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
Color & Clarity	Yellow & Clear or cloudy	**N/A**	**N/A**	
pH	5.0 – 7.0	N/A	N/A	

Specific Gravity	1.003 – 1.035	N/A	N/A	
Glucose	Negative	N/A	N/A	
Protein	Negative	N/A	N/A	
Ketones	Negative	N/A	N/A	
WBC	0.0-20.0	N/A	N/A	
RBC	0.0-20.0	N/A	N/A	
Leukoesterase	Negative	N/A	N/A	

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

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
pH	7.35-7.45	7.49	N/A	The pH is presenting greater than 7.45 indicates the patient is experiencing respiratory alkalosis related to the pulmonary embolism.
PaO2	80-100	74	N/A	A PaO2 less than 80 indicates the patient is experiencing hypoxemia.
PaCO2	35-45	32	N/A	Lower PaCO2 values associated with a pulmonary embolism indicated the patient would be experiencing hypocarbia.

HCO3	22-26	23	N/A	
SaO2	92-100%	97	N/A	

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

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

Lab Correlations Reference (1) (APA):

Complete Blood Count (CBC) Analyzer: Decode Your Results. Verywell Health. (2021). https://www.verywellhealth.com/cbc-test-analyzer-4768236.

Swearingen, P. L., & Wright, J. D. (2019). *All-in-one nursing care planning resource medical-surgical, pediatric, maternity, and Psychiatric-Mental Health*. Elsevier.

Diagnostic Imaging

All Other Diagnostic Tests (5 points)/ Diagnostic Test Correlation (5 points):

1. Chest X-ray: A chest X-ray was performed to see if small infiltrates secondary to atelectasis that results from the decrease in surfactant were visible. The results concluded that a very limited examination dimension and no grossly evident acute cardiopulmonary pathophysiology was present.

2. A computed tomography (CT PE): A computed tomography with contrast was performed to assess for the possibility of a pulmonary embolism. A CT was performed because lung perfusion abnormalities and chest pain origins can be seen, allowing for a rapid turnaround time of diagnosis. The study results were still pending at the time of discharge.
3. Duplex/ doppler: About 30 minutes prior to discharge, the patient had a duplex/doppler performed on his lower extremities. This duplex/doppler was performed to assess the speed of blood flow, and structure of the leg veins to assess for a deep vein thrombosis that could occlude the vein. The results of this test were still pending upon discharge.

Diagnostic Test Reference (1) (APA):

Duplex ultrasound . Stanford Health Care (SHC) - Stanford Medical Center. (2022). https://stanfordhealthcare.org/medical-conditions/blood-heart-circulation/pulmonary-embolism/diagnosis/duplex-ultrasound.html

Swearingen, P. L., & Wright, J. D. (2019). *All-in-one nursing care planning resource medical-surgical, pediatric, maternity, and Psychiatric-Mental Health*. Elsevier.

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

Home Medications (5 required)

Brand/Generic	**Acetaminophen (Tylenol) tablet**	**Apixabun (Eliquis) tablets**	**Calcium carbonate (Tums)**

Dose	**500 mg**	**2 tabs twice a day = 10 mg** **1 tab twice a day = 5 mg**	**1000 mg** **(2 tablets x 500mg)**
Frequency	**Q 4hr PRN**	**2 tabs twice a day for 7 days** **Then 1 tab twice a day**	**Q 6 hr PRN**
Route	**oral**	**oral**	**Oral**
Classification	**Analgesic/ nonsalicylate**	**Factor Xa inhibitor/ Anticoagulant**	**Pharmacological: calcium salts** **Therapeutic: antacids**
Mechanism of Action	**Inhibits the enzymes cyclooxygenase, blocking prostaglandins production and interfering with pain impulse generation in the peripheral nervous system.**	**Reduces the risk of systemic embolism in patients with nonvalvular atrial fibrillation.**	**Neutralizes stomach acid to relieve comfort caused by hyperacidity**
Reason Client Taking	**Mild-moderate muscle pain**	**To treat pulmonary embolism**	**To help with gastric reflux**
Contraindications (2)	**1. Hypersensitivity to acetaminophen with any other medication** **2. Severe hepatic impairment** **3. Severe active liver disease**	**1. Active pathological bleeding** **2. Severe hypersensitivity to apixaban or its components**	**1. Hypercalcemia** **2. Hypersensitivity to calcium salts or their components** **3. hypophosphatemia**
Side Effects/Adverse Reactions (2)	**1. Hypertension** **2. Atelectasis** **3. Dyspnea** **4. Muscle spasms**	**1. Hypotension** **2. Hemorrhagic anemia** **1. hemoptysis**	**1. Hypotension** **2. Hypercalcemia** **3. Nausea** **4. vomiting**
Nursing Considerations (2)	**1. Use acetaminophen cautiously in patients with severe renal impairment** **2. Monitor the patient for hepatotoxicity**	**1. Be aware that if apixaban is discontinues prematurely, thie risk of thrombosis increases** **2. Monitor the patient closely for bleeding, as life-threatening bleeding can occur.** **3. Know that the effects of apixaban may persist for 24 hours after the**	**1. Monitor serum calcium** **2. Assess for Chvostek's and Trousseau's sign**

		last dose	
Key Nursing Assessment(s)/Lab(s) Prior to Administration	**1. AST 2. ALT 3. Bilirubin 4. Creatinine levels 5. Monitor Renal function**	**1. INR 2. Increased bruising 3. Abnormal bleeding (bloody nose, hematuria, blood in stool)**	**1. Serum calcium levels 2. Serum phosphorous levels 3. Blood pressure 4. Assess for Chvostek's and Trousseau's sign**
Client Teaching Needs (2)	**1. Instruct the patient to read the manufacturers' label and follow dosage guidelines precisely. 2. Caution patients not to exceed recommended dosage or take other drugs containing acetaminophen at the same time due to risk of liver damage. 3. Advise the patient to contact their prescriber before taking other prescriptions or over the counter products.**	**1. Emphasize the importance of taking apixaban exactly as prescribed. 2. Tell the patient to report and unusual bleeding or bruising to the provider. 4. Advise the patient to take bleeding precautions, such as using a razor or a soft-bristle toothbrush.**	**1. Urge patient to chew chewable tablets thoroughly before swallowing and to drink a glass of water afterward. 2. Instruct patients to take calcium carbonate tablets 1 to 2 hours after meals.**

Brand/Generic	**Cyclobenzaprine (Flexenil)**	**Melatonin**
Dose	**10 mg x 1 tablet**	**3 mg tabs**
Frequency	**Daily PRN**	**PRN at night**
Route	**Oral**	**oral**
Classification	**Skeletal Muscle Relaxant**	**Pineal hormone agent**
Mechanism of Action	**Helps to relieve skeletal muscle spasms locally without inhibiting the function of the muscles.**	**Melatonin is a derivative of tryptophan, which binds to melatonin receptor creating a single pathway.**
Reason Client Taking	**Muscle spasm**	**To help with insomnia**
Contraindications (2)	**1. Heart failure 2. Hyperthyroidism 3. Hypersensitivity to cyclobenzaprine or its components**	**1. Increased sedative properties when given with anticonvulsants, benzodiazepines, barbiturates, and diphenhydramine. 2. Hypersensitivity to melatonin**
Side Effects/Adverse Reactions (2)	**3. Dyspnea 4. Hypotension 5. palpations**	**1. tachycardia 2. hyperglycemia.**
Nursing Considerations (2)	**3. Assess the patient for autonomic inabilities,**	**1. Assess the patient for increased serum glucose level.**

	mental status changes, and nervous system abnormalities. **4. Monitor the patient if the dose of cyclobenzaprine increases, due to the potential risk of developing life-threatening serotonin syndrome.** **5.**	**2. Monitor the patient's coagulation panel during the treatment.**
Key Nursing Assessment(s)/Lab(s) Prior to Administration	**1. Physical assessment, focusing on CNS orientation** **2. Liver function test** **3. Monitor renal function**	**1. Assess sleep patterns before administering.** **2. Assess blood glucose, coagulation panel, and lipid panel prior to administering to compare base line values.**
Client Teaching Needs (2)	**1. Inform patient about possible lack of alertness and orientation** **2. Advise the patient to ask for assistance with walking, driving, or hazardous activity if they experience dizziness or weakness** **3. Urge the client to avoid alcohol and other CNS depressants during therapy**	**1. Instruct the client to take the medication at bedtime as prescribed.** **2. Educate the client they might fell drowsiness with this medication.** **3. Advise the client to avoid driving or operating heavy machinery after taking melatonin for the night.**

Hospital Medications (5 required)

Brand/Generic	**Acetaminophen (Tylenol) tablet**	**Calcium carbonate (Tums)**	**GuaiFENesin (Mucinex)**
Dose	**500 mg**	**1000 mg (2 tablets x 500mg)**	**200 mg**
Frequency	**Q 4hr PRN**	**Q 6 hr PRN**	**Q 4 hr PRN**
Route	**oral**	**Oral**	**oral**
Classification	**Analgesic/ nonsalicylate**	**Pharmacological: calcium salts** **Therapeutic: antacids**	**Pharmacological: Expectorant**
Mechanism of Action	**Inhibits the enzymes cyclooxygenase, blocking prostaglandins**	**Neutralizes stomach acid to relieve comfort caused by hyperacidity**	**Acts as a skeletal muscle relaxant, binding to neurotransmitter**

	production and interfering with pain impulse generation in the peripheral nervous system.		**receptors in the brain, inhibiting mucus production.**
Reason Client Taking	**Mild-moderate muscle pain**	**To help with gastric reflux**	**Cough and chest congestion**
Contraindications (2)	**1. Hypersensitivity to acetaminophen with any other medication** **2. Severe hepatic impairment** **3. Severe active liver disease**	**1. Hypercalcemia** **2. Hypersensitivity to calcium salts or their components** **3. Hypophosphatemia**	**1. hypersensitivity to guaiFENesin and its components** **2.**
Side Effects/Adverse Reactions (2)	**1. Hypertension** **2. Atelectasis** **3. Dyspnea** **4. Muscle spasms**	**1. Hypotension** **2. Hypercalcemia** **3. Nausea** **4. vomiting**	**1. headache** **2. nausea** **3. vomiting** **4. drowsiness** **5. rashes**
Nursing Considerations (2)	**1. Use acetaminophen cautiously in patients with severe renal impairment** **2. Monitor the patient for hepatotoxicity**	**1. Monitor serum calcium** **2. Assess for Chvostek's and Trousseau's sign**	**1. Brand name confusion has been reported between Mucinex and mucomyst; use caution.** **2. Generic name confusion has been report between guaiFENesin and guanFACINE; use caution.** **3. Monitor for hypersensitivity to medication**
Key Nursing Assessment(s)/Lab(s) Prior to Administration	**1. AST** **2. ALT** **3. Bilirubin** **4. Creatinine levels**	**1. Serum calcium levels** **2. Serum phosphorous levels**	**1. Assess uric acid levels prior to administering.**

	5. **Monitor renal function**	3. **Blood pressure** 4. **Assess for Chvostek's and Trousseau's sign**	2. **Assess renal function.** 3. **Assess type/ severity/ and frequency of cough.** 4. **Assess orientation** 5. **Perform a physical assessment looking for any lesions or rashes**
Client Teaching Needs (2)	1. **Instruct patient to read the manufacturers' label and follow dosage guidelines precisely.** 2. **Caution patients not to exceed recommended dosage or take other drugs containing acetaminophen at the same time due to risk of liver damage.** 3. **Advise the patient to contact their prescriber before taking other prescriptions or over the counter products.**	1. **Urge patient to chew chewable tablets thoroughly before swallowing and to drink a glass of water afterward.** 2. **Instruct patients to take calcium carbonate tablets 1 to 2 hours after meals.**	1. **Advise the patient to avoid driving or operating heavy machinery if they are experiencing any drowsiness or disorientation.** 2. **Advise the patient to stop taking guaifenesin if he experiences a rash, fever, or headache persists more than a week.** 3. **Report fever, rash, severe vomiting, and persistent cough to their provider**

Brand/Generic	**Heparin Sodium injections**	**Ondasteron HCL (PF) (Zofran)**
Dose	**18 u/kg/hr with a concentration of 100 un.ML**	**4 mg push**
Frequency	**18 mL/hr**	**PRN**
Route	**IV injection**	**I.M. Injection**

Classification	**anticoagulant**	**Pharmacological:** **Selevtive serotonin receptor antagonist** **Therapeutic:** **antiemetic**
Mechanism of Action	**Binds with antithrombin III, inactivating the coagulation enzymes to prevent and treat pulmonary embolism.**	**Blocks serotonin receptors peripherally at the vagal nerve terminals in the intestines to prevent nausea and vomiting.**
Reason Client Taking	**The patient was diagnosed with a pulmonary embolism**	**The patient was experiencing nausea and vomiting.**
Contraindications (2)	**1. Hypersensitivity to heparin or its components** **2. Hypersensitivity to pork** **3. Uncontrolled active bleeding**	**1. Hypersensitivity to ondansetron or its components** **2. Concomitant use of apomorphine**
Side Effects/Adverse Reactions (2)	**1. Chest pain** **2. Dyspnea** **3. Heparin resistance**	**1. Chest pain** **2. Hypotension** **3. Palpitations** **4. Pulmonary embolism** **5. hiccups**
Nursing Considerations (2)	**1. Give heparin only subcutaneously or I.V. route; IM can cause hematoma, irritation, and pain.** **2. Expect to adjust the heparin dose based on frequent coagulation time.** **3. During continuous I.V. therapy, expect to obtain APTT after 8 hours of therapy. Use the opposite arm from the infusion site.**	**1. Monitor the patient closely for serotonin syndrome.** **2. Monitor the patient's electrocardiogram (ECG) looking for prolonged QT intervals.**
Key Nursing Assessment(s)/Lab(s) Prior to Administration	**1. Obtain a coagulation test at least 30 minutes prior to administering.** **2. Assess for signs of bruising or bleeding**	**1. ECG** **2. Potassium levels** **3. Magnesium levels** **4. Prior bowel activity**
Client Teaching Needs (2)	**1. Explain that heparin cannot be taken orally.** **2. Tell the patient to avoid drugs that interact with heparin, such as aspirin and ibuprofen.**	**1. Advise the patient to immediately report sign of hypersensitivity, such as rash** **2. Advise patient to seek immediate medical attention if they experience persistent, severe, unusual, or worsening symptoms.**

Medications Reference (1) (APA):

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

Assessment

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

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	 The patient is alert and sitting up in bed, watching MythBusters on the television. Orient x 4 No acute distress Well developed, hydrated, and nourished
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☐** **Type:**	Skin is appropriate for ethnicity. Dry and intact without rashes or lesions Skin is cool to the touch. Normal turgor found near right clavicle bone. No rashes were found on the body. Many small normal bruising found on the legs accompanied by work. The color of the bruises were dark brown and all had a diameters smaller than a quarter. The patient did not present with any edema. No external wounds were found on the patient. 23 No drains present.
HEENT: **Head/Neck:**	The head is normocephalic and atraumatic without tenderness, visible or palpable masses,

	depressions, or scarring. Hair is of normal texture and evenly distributed. The neck appeared normal in size without abnormal swelling glands. The trachea is midline. The carotid pulse was not taken.
Ears:	Ears are symmetrical to the patient's head. No ear drainage was noted. The external ear was not tender to the touch, nor was there any skin break down from the nasal cannula noted. The hearing was diminished bilaterally, but the patient has access and was using his hearing aids for assistance.
Eyes:	Eyes located in the proper place on the patient's face. No eye drainage was noted. Eyelids are normal in appearance without swelling or lesions. Sclera appears to be white in color. EOMs are intact and PERRLA is normal. Eyesight seems to be normal as the patient can see approximately 10 feet away to see the T.V.
Nose:	Nose located in the proper place on the patient's face. The nasal septum is in midline. No nose drainage or mucous was noted. No breakdown of skin tissue surrounding the nose from the nasal cannula.
Teeth:	No abnormal discoloration of the mouth was noted. The oral mucosa was pink, dark brown, and moist throughout the mouth, appropriate with ethnicity. No lesions or sores were noted. Posterior pharynx and tonsils are moist and pink without exudate noted. Tonsils were +2 bilaterally. The uvula is midline; the soft palate rises and falls symmetrically.
CARDIOVASCULAR: **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):**	The external chest is normal in appearance without lifts or heaves. PMI is not visible and is palpated over the 5th intercostal space. No murmurs, gallops, or rubs were found during auscultation. S1 and S2 are heard and are of normal intensity. The patient does have a pacemaker on the left side of her chest.
Peripheral Pulses:	The peripheral pulses were equal x 2.

Capillary refill:	Capillary refills are less than 3 seconds. The nail beds do not appear to have any cyanosis, pitting, or clubbing.
Neck Vein Distention: Y ☐ N ☐	No jugular vein distension was noted.
Edema Y ☐ N ☐ **Location of Edema:**	Slight edema was observed at the leg and ankles bilaterally and scored at a +1. Pillows were being utilized for support. No edema was noticed on the upper extremities bilaterally.
RESPIRATORY: **Accessory muscle use: Y☐ N ☐**	No accessory muscles used to breathe
Breath Sounds: Location, character	The chest wall is symmetric and without deformities. No signs of trauma or respiratory distress. The chest wall is not tender. Lungs sound clear in all the lobes, found on the right and left anterior sides of the body. No crackling or wheezing was noted. The patient did experience SOB when talking. The patient was able to breathe normally with room air.
GASTROINTESTINAL: **Diet at home:**	The patient has no restrictions on foods at home.
Current Diet	The patient is not on a diet restriction while at the hospital.
Height:	177.8 cm (5’10”)
Weight:	112.5 kg (245 lbs 1.6 oz)
Auscultation bowel sounds:	Bowel sounds are present and normoactive in all four quadrants
Last BM:	The paitnent’s last BM was the night prior (2/19/23) during the prior night shift.
Palpation: Pain, Mass etc.: **Inspection:**	The abdomen is soft and symmetrical. The LLQ, near the umbilicus, was tender to deep direct pressure during the head-to-toe assessment. Umbilicus does not have herniation and is located midline. A normal pulse was found in the midline of the abdomen. No masses, enlarged liver, enlarged spleen are noted.
Distention:	No distention was observed.

Incisions:	No incisions were found.
Scars:	No scars were observed on the patient.
Drains:	The patient does not have any drains.
Wounds:	The patient does not have any visible wounds in any quadrants on the stomach.
Ostomy: Y ☐ N ☐	The patient does not have an ostomy.
Nasogastric: Y ☐ N ☐ **Size:** **Feeding tubes/PEG tube Y ☐ N ☐** **Type:**	The patient is not on a nasogastric tube. The patient is not on a feeding tube/ PEG tube.
GENITOURINARY: **Color:**	Bright yellow
Character:	hazy
Quantity of urine:	The patient excreted 300 mL of urine in a 6 hour time frame.
Pain with urination: Y ☐ N ☐	The patient did not experience any pain with urine.
Dialysis: Y ☐ N ☐	The patient was not on dialysis.
Inspection of genitals:	No external masses or lesions. External genitalia was normal in appearance without lesions, swelling, masses, or tenderness.
Catheter: Y ☐ N ☐ **Type:** **Size:**	The patient did not have a catheter present N/A **N/A**
MUSCULOSKELETAL: **Neurovascular status:**	Appropriate mood, good judgment, and insight. No visual or auditory hallucinations were noted. No suicidal or homicidal ideation. The patient behaves appropriately according to his age
ROM:	The patient had a normal range in motion.

Supportive devices:	The patient does not use any supportive devices when active and mobile.
Strength:	The patient has equal strength of +5 bilaterally in both upper and lower extremities.
ADL Assistance: Y☐ N ☐	The patient can move around independently without assistance.
Fall Risk: Y ☐ N☐ **Fall Score:**	5
Activity/Mobility Status: **Independent (up ad lib)** ☐ **Needs assistance with equipment** ☐ **Needs support to stand and walk** ☐	The patient does not needs assistance to stand and walk in the hospital.
NEUROLOGICAL:	.
MAEW: Y ☐ N☐	The patient can move all extremities well.
PERLA: Y ☐ N☐	EOM are intact and PERLA is normal, with the pupils constricting appropriately to light.
Strength Equal: Y ☐ N ☐ if no - Legs ☐ Arms ☐ Both ☐	Muscle strength in both arms and hands are equal and strong. Leg and feet strength both equal and strong.
Orientation:	The patient is awake and oriented x 4.
Mental Status:	The patient appears to behave as stated age.
Speech:	The patient uses logical and comprehendible speech when communicating
Sensory:	Memory is normal and the thought process is intact. No sensory deficits were noted.
LOC:	The patient has not experienced any loss of consciousness recently.
PSYCHOSOCIAL/CULTURAL:	

Coping method(s):	The patient states that he "just walks away from stressful or angering situations, to take a breather." He then stated that he "will return and address the situation when he is cooled down."
Developmental level:	The patient appears to act and think as stated age would behave.
Religion & what it means to pt.:	The patient does not associate with any form of religion. He stated, "I see others believing in that stuff and that's okay, but that is not really my thing, you know?"
Personal/Family Data (Think about home environment, family structure, and available family support):	The patient is single and lives in an apartment complex with one roommate in Urbana, Il. He has no pets in the home.

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0874	76	116/73	20	37.0 C (98.0 F) orally	97% on room air
0949	74	112/68	18	37.1 C (98.8 F) orally	99 % on room air

Vital Sign Trends:

All these vitals have stayed within normal range. Although within normal range, the heart rate has worsened, the blood pressure has gotten better, the respiratory rate has decreased, the temperature has increased, and the oxygen saturation has improved.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0847	1-10	None	0	None	none
0940	1-10	Left lower chest	5	Spasming pain	Administered pain meds (acetaminophen and methocarbamol)

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: 20 G **Location of IV:** Left antecubital **Date on IV:** 2/19/2023 **Patency of IV:** intact **Signs of erythema, drainage, etc.:** No signs of erythema, drainage, or infection noted. **IV dressing assessment:** The dressing in place, clean, dry, and intact.	The patient was on Heparin (premix) 18 u/kg/hr at the flow rate of 18 mL/hr with the concentration at 100 Un/mL. The IV was established on 2/19/2023 with a 20 gauge needle in the left antecubital. The area around the IV site did not show any sign of inflammation or redness. No signs of drainage or possible infection noted. The dressing around the IV appeared in place, dry, clean and intact with no discharge noted. The patient was expected to stop the heparin drip at 1015 due to being discharged.

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
500 mL	300 mL

Nursing Care

Summary of Care (2 points)

Overview of care:

The patient is a 48-year-old male without a significant past medical history presenting with left chest pain that worsens with breathing and coughing. The patient described the chest pain as a spasming feeling. The patient also reports the cough started 1 week prior. The patient was tested for covid when the cough began, which concluded with negative results. Following the covid test, the patient began to experience palpations. The patient was worried about the palpations, so he went to the emergency department. Upon arrival at the emergency department, the patient was tachycardic. The ED ran a D-dimer, which resulted in positive results, so a CT PE (computed tomography for pulmonary embolism) was performed. In this CT PE the patient showed a presence of a bilateral pulmonary embolism, so heart strain became a concern. Troponin levels were also tested, and the results were negative. The patient did not require oxygen. The patient was started on a heparin drip and was admitted to the hospital for further monitoring.

Procedures/testing done:

Routine blood work was taken, as well as an CT scan with contrast, ABG, a chest X-ray, and a duplex/doppler ultrasound. Lab work came back with some abnormalities, with the biggest abnormality being the D-dimer and glucose, which were both increased. The ABG presented with low PaO2, low PaCO2, and an increased pH level. The CT scan and ultrasound results were still pending when the patient was discharged.

Complaints/Issues:

The patient did not have any complaints about the hospital so far during his stay.

Vital signs (stable/unstable):

The vital signs remained stable throughout the shift.

Tolerating diet, activity, etc.:

The patient was able to tolerate diet and activity as normal and independently throughout the shift.

Physician notifications:

The physician was notified that the ultrasound or CT results were not concluded prior to discharge and to see if it was still alright to discharge the client. The physician signed off on the discharge.

Future plans for client:

The patient plans on returning home following discharge at 11:30 am on 2/20/23., and then follow up with his primary car provider within one week of discharge.

Discharge Planning (2 points)

Discharge location:

The patient planned on going back home with his roommate.

Home health needs (if applicable):

The patient does not need any home health assistance.

Equipment needs (if applicable):

The patient does not need any equipment assistance.

Follow up plan:

The patient is to follow up with their primary care provider in one week of discharge.

Education needs:

The patient was prescribed Eliquis prior to discharge. The patient will need to be taught about bleeding precautions, appropriate dosage, and medication adherence.

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

Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components • Listed in order by priority – highest priority to lowest priority pertinent to this client	**Rationale** • Explain why the nursing diagnosis was chosen	**Interventions (2 per dx)**	**Outcome Goal (1 per dx)**	**Evaluation** • How did the client/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Risk for ineffective breathing patterns related to chest pain as evidence by tachycardia, pain worsening on inspiration, and abnormal ABG levels.	In nursing priorities, ABCs should be followed, and inefficient breathing patterns affect the airway, which is why this nursing diagnosis is a priority.	1. Administer pain medication as prescribed by the provider. 2. Assess the respiratory rate, rhythm, and depth. Assess for shortness of breath and the use of accessory muscles and encourage deep breathing and coughing exercise 3. Reinforce splinting	1. The client will maintain effective breathing patterns, as evidence by relaxed breathing at a normal rate and depth with the absence of tachycardia, pain with inspiration, and normal ABG levels.	The patient responded well to the medication given and the idea of using pillows for deep breathing.

		of the chest with pillows during deep breathing or coughing.		
2. Risk for bleeding related to anticoagulant therapy as evidence by potential bruising of the skin.	Anticoagulant therapy increases the risk for bleeding in patients, so they should be on bleeding precautions.	1. Assess vital signs and compare to baseline readings. 2. Assess the skin for any abnormal bruising. 3. Monitor INR and PT levels regularly.	1. Prevention of further complications and total occlusion related to a clot from the pulmonary embolism.	The patient responded well to this treatment and understood the goal and purpose of this therapeutic treatment.
3. Risk for knowledge deficient related to a new medical condition as evidence by not having a past medical or surgical history.	Due to the patient not having a past medical or surgical history, information might be harder for him to understand.	1.Provide information on the causes of PE 2.Provide information about risk factors of PE. 3. Explain the purpose of activity restrictions and the need for the balance of activity and rest.	1. The patient will understand his diagnosis and why he needs to have a balance of why rest and activity is important.	The patient responded well and stated that he understood what caused his pulmonary embolism and that his obesity is a risk factor for pulmonary embolism.
4. Risk for knowledge deficient related to a new treatment as evidence	Accurate knowledge about medication can reduces future complications.	1. Educate the client about medications, their actions, dosages and side	1. The patient will adhere to medicine compliance and the patient will see normal INR and PT lab values.	The patient seem to understand the teaching by nodding and receiving answers to questions asked

by unfamiliarity with the new information and questioning members of health care team to find out more information about the medication.		effects. 2. Discuss the use of medical alert bracelet or other identification, especially for risk of bleeding.		during teaching. An outcome of the medication adherence was not able to be observed in the time frame.

Other References (APA):

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

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

Concept Map (20 Points):

Subjective Data

- The patient confirmed that he has no significant past medical or surgical history.
- The patient stated that he got his "high school diploma from Urbana Highschool"
- The patient states that his pain was a "5" in his lower left chest area. He describes it a as a "spasming pain."
- He states that he "just walks away from stressful or angering situations, to take a breather." He then stated that he "will return and address the situation when he is cooled down."
- When referring to the fact that he does not believe in any specific relight, he stated, "I see others believing in that stuff and that's okay, but that is not really my thing, you know?"

Nursing Diagnosis/Outcomes

- Risk for ineffective breathing patterns related to chest pain as evidenced by tachycardia, pain worsening on inspiration, and abnormal ABG levels.
- Risk for bleeding related to anticoagulant therapy as evidenced by potential bruising of the skin.
- Risk for knowledge deficiency related to a new medical condition as evidenced by not having a past medical or surgical history.
- Risk for knowledge deficiency related to a new treatment as evidenced by unfamiliarity with the new information and questioning members of the health care team to find out more information about the medication.

Objective Data

- Pulse was 76 @ 0847 & 0921
- Bp: 116/73 @ 0847; 112/68 @ 0921
- RR: 20 @ 0847 & 0921
- Temp: 37.0 C (orally) @ 0847; 37.1 C (orally) @ 0921
- SpO2: 97% (room air) @ 0847; 99% (room air) @ 0921

Client Information

- Age: 43 years old
- Gender: male
- Race/ethnicity: African American
- Marital status: single
- Height: 177.8 cm
- Weight: 112.5 kg
- Code status: full code
- Occupation: Part-time at Alphia Care

Nursing Interventions

- Administer pain medication as prescribed by the provider.
- Assess the respiratory rate, rhythm, and depth. Assess for shortness of breath and the use of accessory muscles and encourage deep breathing and coughing exercise.
- Reinforce splinting of the chest with pillows during deep breathing or coughing
- Assess vital signs and compare to baseline readings.
- Assess the skin for any abnormal bruising.
- Monitor INR and PT levels regularly.
- Provide information on the causes of PE.
- Provide information about the risk factors of PE.
- Explain the purpose of activity restrictions and the need for a balance of activity and rest.
- Educate the client about medications, their actions, dosages, and side effects.
- Discuss the use of a medical alert bracelet or other identification, especially for risk of bleeding.